

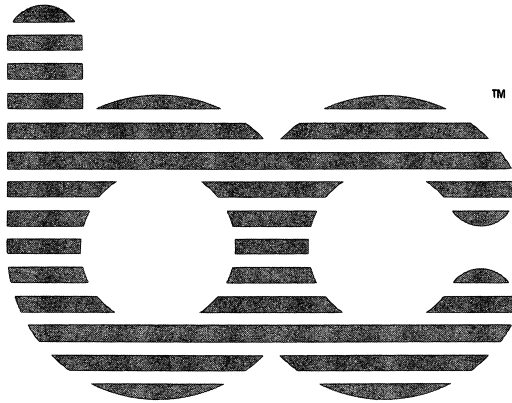
SQUIRE

THE FINANCIAL PLANNING SIMULATION™



BLUE CHIP SOFTWARE™

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BLUE CHIP SOFTWARE

185 Berry Street
San Francisco, CA 94107
(415) 546-1866

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INTRODUCTION

Most of us are easily convinced of the need for financial planning. But what does it really mean?

Quite simply, financial planning is the process of setting financial goals and then creating a strategy for achieving them. It takes into account a number of diverse factors, including (but certainly not limited to) salary and income, the amount of money used for living expenses, how much is saved, the taxes paid, and investments made.

There is no perfect financial plan. Everyone's life style is different. One person might be willing to make sacrifices or take risks that another person would not. But creating a solid financial plan that takes into account your own personal variables will result in your being able to keep more of what you earn, build a bigger retirement nest egg, let you live more comfortably than would otherwise be possible, and, ultimately, permit you to exercise some control over your own destiny.

Squire is an adventure into your financial future. Under remarkably realistic conditions, it will let you input your own goals and life style requirements, then let you test various financial plans you might create in order to reach your objectives.

Along the way, you will acquire valuable insights into how money works. You will also begin to develop financial instincts, a sort of "sixth sense" that will prove invaluable when you create and implement your own financial plan in real life.

SQUIRE

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HOW TO USE THIS MANUAL

It is not necessary to read this manual from cover to cover before playing Squire. If you are unfamiliar with financial planning concepts, start with Chapter 1, "A Financial Planning Primer." Next use Appendix D, "Loading Instructions" to get Squire going on your computer system.

Now read Chapter 2, "Game Playing Basics," while in front of your computer. Try the various commands on the computer as you read through this chapter.

Each of Squire's investment tools has its own chapter which contains both a tutorial and a how to play section (Chapters 3 to 11). As you are playing Squire and decide to invest in the commodities market, refer to Chapter 8, "Commodity Market," to brush up on your understanding of the market, and to learn how to wheel and deal in commodities. Don't try to swallow everything at once. Start out investing and reading about one investment tool at a time.

Once you feel comfortable investing in all of Squire's investment tools, read Chapter 12, "Reality Mode." This will show you how to set up Squire with your real life retirement scenario.

Squire's appendix contains a complete glossary of terms, a description of error messages you may encounter, abbreviations, and loading instructions for the various computers Squire runs on.

CHAPTER 1

A FINANCIAL PLANNING PRIMER

Financial planning is the process of setting financial goals and creating a strategy for achieving them. Before we dive into the process of financial planning, you will need to understand the “time value of money” concept.

Money has no intrinsic value.

That is, a dollar bill is merely a piece of paper. You can’t build with it, eat it, or heat your house with it.

Paper money is merely an accepted way of “storing” the value of labor in a convenient, portable form. This is as opposed to gold which has intrinsic value. Aside from its enchanting beauty, gold has a multitude of industrial applications which, when combined with its rarity, give it a usable value. However, it would be highly impractical to carry bulky, heavy gold bars around. Hence, paper money.

When you put money in the bank, you are paid for the use of your money in the form of interest. With no inflation, the 10% interest paid on your savings will actually increase the amount of goods and services you can buy by 1/10th every year.

Ah... but one of the chief objectives of financial planning is coping with inflation.

WHAT IS INFLATION?

Inflation is the decrease of the buying power of a unit of currency (e.g. a dollar) over time. Although the causes of inflation are many and varied, a primary cause in today’s economy is the government spending more money than it takes from us in taxes. In an inflationary economy it is necessary to continually increase your income just to maintain your standard of living.

Inflation has a very significant effect on financial planning. If you put money in a savings account and earn 10% interest, but the inflation rate is 7% annually (that means your money buys 7% fewer goods and services than it did a year earlier), the buying power of your money is still increasing, but only by 3%.

TIME VALUE OF MONEY

All this relates to the concept of the time value of money. As you deposit money, you earn interest. Soon you begin to earn interest on your interest, and your savings grow like a snowball rolling down a hill.

Using the time value of money concept, you can determine how much you will need to save to accumulate a certain amount of money at some future point in time. You must take into account that inflation will raise the price of things that you wish to purchase. In Squire, the time value of money concept is vital in projecting the required dollar needs for your children’s college education, housing, and retirement.

Assuming an average 8% inflation rate, your current \$100.00 a week food bill would grow to \$317.00 a week in 15 years. When planning how much income you will need when you retire, you must consider what the future costs are likely to be. Here the time value of money works against you, as everything will be more expensive when you retire.

The time value of money can work for you when you put your money in a savings account. Assume you put \$100.00 into a savings account yielding 8% annual interest for 15 years. After the first year, you would have \$108.00 in the bank. The next year, you would receive 8% interest on \$108.00 (not the \$100.00 you started with). Over 15 years this would snowball into \$317.00. Small investments held for long periods can generate amazing sums!

The greater the interest rate (or inflation rate), the faster this snowball effect occurs. If a

bank paid you 16% interest instead of 8% over 15 years, your \$100.00 investment would grow to \$826.00.

Playing Squire will help reinforce the concepts so don't worry if you are having trouble grasping them now.

RETIREMENT LIFE STYLE

In order to put together a financial plan, you must first decide when you would like to retire, and what kind of life style you desire during retirement. Will it be a town house in the city, or perhaps a small cottage in the country? Try to estimate in today's dollars (what it would cost today) the cost of maintaining your projected life style. In Squire we use the following categories to determine your life style:

RENT: If you are renting, consider your space needs after the children are gone. You may need a smaller apartment located in an area close to shopping and recreation areas. Estimate the monthly rental cost based on today's dollars.

HOUSE PAYMENTS: Determine if your house will be paid for at retirement, or if payments will continue. Often, by adding a few dollars a month to the monthly payment now, it may be possible to pay the house off by retirement. If your house payments continue past retirement they will be at a relatively constant rate.

PROPERTY TAXES: Enter your present day amount.

FOOD: Your food tastes and needs may change after retirement. Consider your present monthly food needs, without the children's finicky appetites.

INSURANCE: Your insurance needs are likely to remain relatively similar. Your medical insurance costs will rise, but your auto insurance will cease if you stop driving.

MEDICAL: Medical costs are the major expense of retired persons. If you have a special medical problem, budget more money for this item.

UTILITIES: Adjust this downward only if you plan to decrease the size of your home significantly.

RECREATION: Recreation expenses will vary according to with your hobbies and life style. Consider your retirement age and physical capabilities in determining your recreational needs.

AUTOMOBILE: If you plan to drive after retirement, you should provide for gas and maintenance fees.

The next step in financial planning is to make an educated guess as to the average annual inflation rate between now and the time you expect to retire. In Squire we assume it will be 8%. You can now use this inflation rate to estimate what kind of annual income you will require in order to maintain the life style you desire. Squire's reality mode will painlessly prompt you for all the proper information and do the necessary mathematical calculations.

EXAMPLE: You determine that you want to retire in 15 years. You will require \$30,000 a year in today's dollars and the annual inflation rate will be 8%. When you retire you will need an annual income of \$95,000.

WHERE WILL THE MONEY COME FROM?

The secret to a secure retirement is to build up a nest egg of investments that will generate a steady income at the level you desire. There are many methods of accomplishing this.

LIVE OFF INTEREST OR DIVIDENDS

A retiree could deposit a sum of money in an interest-bearing account and use the interest income generated for support. This approach will leave the capital intact for the retiree's estate after death. The problem with this approach is that it requires a large capital deposit to generate a comfortable monthly income.

In Squire we assume that you will deposit your nest egg in a bank account yielding 8%

annual interest. In order to generate an annual income of \$95,000, you would require a \$1,189,000 nest egg in the bank.

LIVE OFF INTEREST AND PART OF THE PRINCIPLE

Another popular method of financing retirement is called an "annuity contract." Under this plan, you (the annuitant or purchaser of the annuity) enter into an agreement with an insurance company for lifetime retirement income. You make a one-time lump sum payment. The insurance company, called the insurer, determines your probable remaining life expectancy based on present age, sex and health. As annuitant, you then receive a fixed monthly payment for the remainder of your life. The payments are composed of part interest and part principle. If the annuitant outlives the predicted death date, then the insurer must continue the payments throughout the lifetime of the annuitant.

The price of an annuity is greatly dependent on the age at which you plan to retire. An annuity could get you into trouble if the inflation rate were to increase dramatically, since your income would be fixed.

INTERIM FINANCIAL GOALS

In addition to a retirement goal, each of us has special financial needs that can drain income or siphon off capital. These may keep us from meeting our ultimate objectives. Short-term interim goals might include saving for a down payment on a house or an expensive automobile. Medium range goals include education of children, and should be planned for well in advance. When setting interim goals, you must again take into account the effects of inflation on the costs of your goals. A \$10,000 college education today will cost you \$14,600 in 5 years at an 8% inflation rate. You must plan for these interim goals so that when the time comes this will not drain funds from your retirement nest egg.

UNEXPECTED EVENTS

Surprises, both pleasant and unpleasant, can also affect our progress towards both interim and long-term financial goals. If a loved one gets sick and you must pay \$10,000 in medical bills, will you still be able to meet your financial goals?

INVESTMENT TOOLS

In order to build your retirement nest egg, you will have to wisely invest your money. Different kinds of investments yield different rates of return. Generally speaking, the greater the risk of losing money, the greater the rate of return on your investment. A \$1,000 investment in a safe savings account for a year may earn you \$80.00 (8% annual yield). A \$1,000 investment in the stock market over the same period could earn \$200. Of course you could lose money in the stock market as well. Another way to earn a larger return on your investments is to give up the use of your money for a long time. Investing in a 90-day treasury bill will generally earn higher interest than a savings account because you lose the use of your money for 90 days. An investment that can be turned into cash quickly is considered to be a liquid asset. Therefore, the term "liquidity" refers to how quickly you can convert an investment to cash without substantial loss.

WHAT TOOLS SHOULD I USE?

When selecting where to invest your money, you must consider three factors: the risk of losing money; the return on your investment (yield); and how liquid your investment will be.

You should always keep a portion of your investments highly liquid. If an emergency arises you will be able to raise cash quickly and will not be forced to sell off other investments at what might turn out to be an inopportune time.

When interim goals come up, such as

sending your kids to college, you should move enough of your assets into liquid investments to meet the interim goal when it falls due.

When determining a strategy for earning that nest egg you must consider two factors.

The first factor is the number of years until you retire. The greater the number of years, the more conservative your investments can be. A small investment in a savings account over 30 years can grow to amazing proportions.

The second factor is the difference between your current assets and your retirement goal. If you have \$1,000 in the bank and need a \$1,000,000 nest egg, you must increase that initial \$1,000 one thousand times between now and the time you retire. The greater the difference between your current assets and your retirement goal, the more aggressive (and risky) your investments will have to be.

LEVERAGE

Before outlining the various kinds of investment tools you can use, you should understand what leverage is. Some types of investments allow you to control assets worth much more than your initial investment. For instance, in the commodity market \$1.00 can control \$10.00 worth of gold. If the gold price increases 10%, to \$11.00, your profit will be 100%, or \$1.00 (i.e. \$1.00 invested and \$1.00 profit). In the stock market you can borrow half the money needed to buy stock. This means that \$1.00 can control \$2.00 of stock. The unfortunate thing about leverage is that you can lose money as fast as you can make it.

INCOME TAX: THE INVESTMENT THIEF

In order to fully understand the characteristics of the various investment tools, you must first be aware of their tax consequences.

As you acquire earnings, interest, dividends, etc., a portion is usually owed to the federal and state governments. This siphoning off of a

part of the income as taxes reduces the growth of your investments.

All income has some type of tax implication. There are two basic rates of taxation. Your paycheck, stock dividends, and interest are taxed as ordinary income, typically at a rate ranging between 30% and 50% of your income. The term "short-term gain" refers to an investment taxed as ordinary income. The second rate of taxation is called long-term gain. This is when you buy an asset (like stocks) and hold it for at least 6 months before selling it. Long-term gains are taxed at around 15% of your profit.

Many legal methods are available to help the investor delay or avoid payment of taxes.

If you lose money on an investment, you can generally use that loss to offset a gain on another investment to avoid taxation. A long-term loss of \$1,000 will offset (or cancel) the taxes due on a \$1,000 long-term gain. Because of the different tax rates, it takes \$2,000 of long term losses to offset \$1,000 of short-term gains.

The income from some sources may be free from income tax. Local governments may issue tax-exempt bonds to finance city projects.

Income may also be deferred to some future date. The most common example of this is an IRA (Individual Retirement Account) where taxes are deferred until you withdraw the money during your retirement.

The following brief descriptions outline the various types of investment tools available to the investor. Many of these tools can be traded while playing Squire. The investment tools available in Squire are described in much greater detail in subsequent chapters.

STOCKS

Stock represents a share in the ownership of a corporation. Large, stable corporations, which consistently return a dividend to their

stockholders, are called "blue chip" companies. Since they distribute a large portion of their profits as dividends, relatively little is left over for growth, causing these companies to grow at a slow but steady pace. An investment in blue chip stocks requires only a small risk and generates a steady income. Dividends are taxable as ordinary income.

Fast growing companies reinvest their profits to fund their rapid growth. These companies pay no dividends, but their stock may increase in value at a rapid rate. These stocks may fluctuate wildly with changes in market conditions or other outside influences. Even carefully selected growth stocks entail considerable risk. Growth stocks are an excellent investment for investors willing to take larger than average risks in order to share in potentially larger than average returns. Profits on the sale of stock may be treated as long-term gains.

BONDS

One way for a corporation to borrow money is to sell bonds. A bond is an unsecured promise by the corporation to repay the debt at some definite date in the future. In return for the use of your money, the corporation pays you interest. This interest rate is referred to as the "coupon rate." Bonds are sold on the open market, and their value fluctuates with the market interest rates. As market interest rates drop, bond prices rise. A Class AA bond is considered to be a very safe investment.

A Class B bond is considered to be a risky investment. Often the financial health of the issuing company is questionable, requiring it to pay a higher rate of interest than companies with better financial ratings in order to attract investors.

IRA

IRA stands for Individual Retirement Account. Recent tax law changes allow investors to deposit \$2,000 a year in a special retire-

ment account. The money placed in an IRA is exempt from taxation until retirement. This allows the investor to build toward retirement using pre-tax dollars rather than money that has had 30% to 50% taxes deducted. Many investment counselors feel this is the best retirement investment available.

MONEY MARKET ACCOUNTS

A money market management firm can be a bank, savings and loan, or a variety of other types of investment companies. The management firm pools investors' money and invests it in government T-Bills or short-term notes issued by private corporations. Money market investors may write checks against their account, or may withdraw the entire amount. A money market account can provide above-average returns by using the pooled money to make investments an individual could not afford.

COMMODITIES

Commodities range from soybeans to Swiss francs. The commodity exchange is a place where investors exchange promises to buy or sell a commodity at some future date. It is not necessary to actually buy or sell a commodity to invest in the market. As only promises are exchanged, a very small good faith deposit can secure a very large investment. This is called "leveraging." Since many commodity prices move in a volatile manner, this is considered a very risky type of investment. It is possible to make many times an initial investment. But an initial investment can also be lost many times over, and very quickly!

COLLECTIBLES

"Collectibles" is a term that includes such diverse items as rare art, Oriental rugs, and

antique furniture. During the 70s, collectors of all sorts of things, from baseball cards to ancient artifacts, discovered they could not only enjoy their possessions, but could use them to beat inflation and realize profits in excess of their investments. Unfortunately, the public's taste is fickle, and today's treasures may become tomorrow's junk. Furthermore, there is no organized market for collectibles, making them difficult to sell. Collectibles will generally bring low prices during a recession and high prices during periods of prosperity.

REAL ESTATE

The real estate market represents a large number of business opportunities involving real property. Real property is defined as land, along with the trees and buildings on the land. Residential or commercial real estate that is rented out can provide tax deferred capital growth, and a hedge against inflation. This is one of the only income-producing investments that will increase its yield in each successive year. Rental income that barely covers the payments today could grow every year, if rents are raised.

ANNUITIES

An annuity is an agreement with an insurance company to provide equal monthly payments for the remainder of one's life in exchange for a sum of money. A person who lives longer than the insurance company's estimate can do very well with this type of investment.

FEDERAL HOME MORTGAGE ASSOCIATION

The Federal Home Mortgage Insurance Co. purchases groups of residential loans from banks and lending agencies. These loans all bear the same interest rate and will be paid off on the same date. "Fannie Mae" investors receive a definite monthly payment consisting of interest and principle until the contract ending

date, at which time the loan is paid in full. Interest received from a Fannie Mae is taxable as ordinary income, while return of the investor's capital is not taxable income.

PERSONAL PROPERTY INVESTMENT

An investor can purchase a tangible item such as a computer, a truck, or a machine, and rent it to a business for a monthly lease fee. The lease income may cover the investor's cost (purchase price plus interest) to acquire the asset. The depreciation loss on the asset (often a paper loss) may shelter other income. However, if the asset is sold, the difference between the sale price and the depreciated value may be taxable as ordinary income.

LOSS MULTIPLIER

In the loss multiplier partnership, the investor is in a high tax bracket (35% to 50%). He invests in a high-risk speculation program. The program generates large tax losses that offset other income to produce a net tax savings. The IRS looks for the economic substance of these programs, and could upset the partnership as a scam.

An example of a loss multiplier investment is an oil and gas limited partnership. The oil and gas industry provides some unique opportunities for investors to generate tax-free income. A group of investors will pool their money to explore, develop, and produce oil fields. This type of investment entails moderate to high risks. Because of two factors called depletion allowance and intangible drilling costs, this type of investment can be almost 100% sheltered from income taxes. Funds invested in a limited partnership of this nature are usually difficult to withdraw.

TAX DEFERRED INCOME

If an investor receives an unusual amount of income in a single year, he may want to defer claiming some of the income until the

next year. One way to do this is to purchase a herd of cattle just before the end of the year and take the purchase price of the cattle as a business expense in the current year's taxes. The investor would have the cattle fattened up for slaughter and then sell them after the 1st of the next year. Along with deferring income for a year, the investor might make a small profit on the sale of the cattle.

GETTING STARTED

Now that you have a general understanding of the investment tools available, you can start to formulate a retirement investment strategy. You might decide to put 40% of your income into the money market, 40% into growth stocks, and 20% into commodities. Squire is the perfect vehicle for testing out various investment strategies to find the one that works best for you.

The next step is to learn by doing. Chapter 2, "Game Playing Basics," will show you how to wheel and deal with Squire's various investment tools.

CHAPTER 2

GAME PLAYING BASICS

The objective while playing Squire is to retire with enough money in the bank to live comfortably for the rest of your life. Squire can be played two ways. You can let Squire pick your retirement goals for you (the default mode), or you can specify your own goals (the reality mode).

THE DEFAULT MODE

In the default mode, Squire assumes that you want to retire in 20 years with \$1,000,000 in the bank. The term "net worth" is used in Squire to describe the value of all your investments and cash at any point in time (less any liabilities). The game starts in the 14th month of a 240-month simulation. Squire starts you out with \$70,500. Each month you buy and sell various types of investments trying to further your objective to accumulate one million dollars.

THE REALITY MODE

In the reality mode, Squire helps you determine how much money you will need to accumulate, depending on the life style you want to maintain and the number of years until you retire. This becomes your "goal." Squire then allows you to enter in all of your current assets, and they are converted into the various investment types used in Squire. Therefore, you start with an investment portfolio similar to what you have in real life. You may also specify interim retirement goals in the reality mode, such as sending your children to college. As in the default mode, you buy and sell investments in order to meet your retirement goal before you reach the magic retirement date. Chapter 12 covers the reality mode in greater detail.

THE BIG PICTURE

Regardless of whether you select the default or reality mode, the play of the game is the same. Each month you will read the newspaper, examine various economic indicators, research investment trends, and buy or sell a vast range of investment tools. You will have to make a variety of trade-offs between short-term cash needs, long-term retirement goals, and deferring income taxes.

STATUS LEVELS

Squire bestows upon you various status names to help you mark your progress towards your retirement goal. In the default game you start out as a Novice. In the reality mode your starting status depends upon your starting assets. The following status levels can be achieved during a session of Squire:

- NOVICE — less than 10% of your retirement goal achieved.
- INVESTOR — when you reach 10% of your retirement goal.
- SPECULATOR — when you reach 25% of your retirement goal.
- BROKER — when you reach 50% of your retirement goal.
- SQUIRE — when you reach 100% of your retirement goal.

When you reach a new status level, Squire will congratulate you. On the downside, if you let your net worth drop below \$3,000, Squire will declare you bankrupt and you will have to start your quest for a happy retirement over again.

THE WORLD OF SQUIRE

Squire makes lots of assumptions about the real world. Inflation is assumed to be 8% a year. The inflation rate is used to project future income needs in the reality mode. However, the inflation rate does not influence

the price of investments over the course of the game. Squire assumes your net worth at retirement yields 8%. This is used to determine how big a nest egg you need in the bank to achieve a specified annual income.

All short-term gains or losses are taxed at 30%. All long-term gains or losses are taxed at 15%. If you have a tax loss at the end of the year, Squire will not carry the loss over to the next year. You must hold an asset for 6 months in order to get long-term gains tax treatment. Real estate depreciation is assumed to be 1% per month (more on this in Chapter 8).

ENTERING INFORMATION

If Squire asks you a question and there are several periods following the prompt, you need only enter a single keystroke.

EXAMPLE: "Do you want to sell short (Y or N)..." Entering Y or N is all you need to do. Pressing the SPACE BAR in response to a prompt with periods following it will return you to the previous menu.

If a prompt has a question mark, you' must enter the answer and then press the ENTER or RETURN key on your computer.

EXAMPLE: "Enter amount of money?" Pressing just RETURN in response to this prompt will display a brief error message, with no harm done, and return you to the previous menu. If you make a mistake while entering an answer, you can use the backspace key to correct it.

THE ONLY CONSTANT IS CHANGE

At the start of each game your computer creates a new economic environment. This environment consists of 240 months of investment price changes and news messages. You start out in February, 1986 (in the default mode). With each new month the various investment and economic indicators change, just like they do in the real world. On the

240th month (or earlier, if you are in the reality mode) Squire converts your assets to cash. This amount is recorded in the player directory under "last score." Squire also keeps track of the highest score and status you have achieved. If you fail to achieve Squire status in a single session, you must start over as a Novice again the next time you play.

It is important to note that the economic environment created in Squire is not just a bunch of random numbers. News messages actually indicate future price movement. There are multiple influence factors on various investments, and price movement trends can be identified and capitalized on. This complex economic simulation is the result of years of research at Blue Chip Software. Each time you start a session of Squire a completely new and unique economic environment is created.

PLAYER DIRECTORY AND SAVED GAMES

The computer can store the game results for as many as 14 players (i.e. end-of-session cash and status). If you want to stop a session before the 240th month you can save the complete game status, including the economic environment, and recall it later.

Only one game can be saved on a disk at a time. If you have saved a game and subsequently your friend saves a game, the first saved game will be erased.

Once you recall a saved game, it is erased from the disk. You may of course save it again at any time during play.

ABBREVIATIONS

Squire uses numerous abbreviations. The definitions of the abbreviations can be found in Appendix C.

FIGURE 1

**SQUIRE
FINANCIAL PLANNING SIMULATION™**

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VERSION 1.0
WRITTEN BY JIM ZUBER

- (C)LEAR — Clear player directory.
- (P)LAY — Play the standard game.
- (Q)UIT — Quit playing Squire.
- (R)EALITY — Play the reality game.
- (S)AVED — Play a saved game.

Enter action desired...

READY TO GO

Figure 1 is the first thing displayed when you start Squire (refer to Appendix C, "Loading Instructions"). At this point you have 5 options that can be selected by pressing the first letter of each command.

These options are:

- (C)LEAR — This will erase all the names currently in the player directory.
- (P)LAY — This will create a new game in the default mode.
- (Q)UIT — Exit the Squire program.
- (R)EALITY — This will create a new game in the reality mode.
- (S)AVED — This will recall a previously saved game.

Let's create a default mode game and see how Squire works! Press P for PLAY.

FIGURE 2

NAME	LAST SCORE	HIGH SCORE	STATUS
1. BC	500,000	500,000	BROKER

Enter player number desired.
If you are a new player, press RETURN.
?

As shown in Figure 2, a player directory is displayed with every player's move, last score, high score, and high status. In Squire your score is in dollars. As you can see, BC is listed as player #1. Since you are a new player just press RETURN and Squire will ask you to enter your initials. Actually Squire will accept any name not longer than 5 characters. After typing your name, press RETURN.

NOW YOU KNOW WHAT YOU ARE DOING...

Because you can only store 14 players' names in the directory, we suggest that you have occasional guests use BC's status for trying the game. Squire enters your name in the player directory, starting you out as a Novice with \$70,500 (in default mode). Squire is now generating a new economic environment for you. As this is a very complex process, it takes between 2 and 12 minutes, depending on your particular computer system. When you quit or save a game session without saving it, your new status, cash, and high score is stored in the player directory. The next time you start a game your name will be listed as player #2. If the player directory fills up you can use the C (Clear) command. This will erase all names in the player directory except BC.

The various figures shown in the manual will not be identical to those on your screen, as each game created is unique.

As we wait for the new game to be created, let's discuss what's ahead. This chapter is going to give you an overview on how to play Squire. Specifics on how to buy and sell for each investment type are outlined in separate chapters for each type of investment.

WHEELING AND DEALING

Squire is played from what we call the "command mode." This is how you buy, sell, and research investments. When you complete all the wheeling and dealing you desire for one month, you move on to the next month. When you advance to a new month, a wide range of information is displayed before returning you to the command mode for more wheeling and dealing.

This command mode is the first screen you will see.

FIGURE 3

	AGE: 36	NOVICE	
NET:	\$70,500	GOAL:	7% FEB 86
CASH:	\$70,500	TAX:	\$150

MENU SELECTION

BUY——Invest your money.
CASH——Display pre-tax income.
DESCRIP——Display descriptions.
END——Save or quit game.
GRAPH——Display graphs.
INTERIM——Display interim goal status.
MONTH——Advance to next month.
NEWS——Display news/price changes.
PORT——Display investment portfolio.
QUICK——Advance with no display.
RETIRE——Display retirement status.
SELL——Sell your investments.
TAX——Review tax status.

Enter action desired...

COMMAND MODE

Figure 3 shows Squire's command mode. From this point you will research your investments, buy, sell, and move on to new months. A menu of command options will always be displayed while you are in the command mode. Pressing the first letter of each command will activate the action described adjacent to the command.

STATUS AREA

The top three lines of the screen are called the status area. Working from the top down we have: your current age (AGE), your status (NOVICE), your current net worth (NET), your current cash (CASH), the percentage of your retirement goal you have achieved (GOAL), the current date (FEB 86), and your current tax obligation (TAX). If you have a tax credit, a CR will appear next to taxes.

NET WORTH

Net worth is Squire's yard stick of success. When your net worth becomes equal to (or greater than) your retirement goal, you have won the game. Net worth is the sum of the current market value of everything you own, including cash, less your outstanding loans. It does not include commissions or penalties you might have to pay if you actually sold some of your investments, and it does not include your current tax obligation.

Every time you buy, sell, or move on to the next month, the information in the status area of the command mode will be updated.

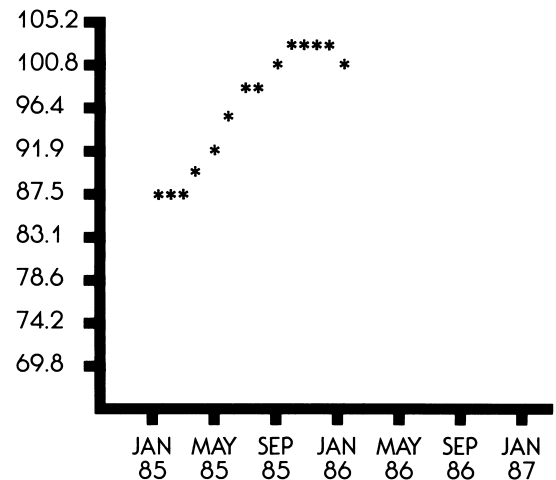
Squire actually starts you out with \$70,000 in the default mode. Because you receive \$500 disposable income each month, you now have \$70,500. Since your net worth is less than 10% of your retirement goal, your status is Novice.

Now try pressing M for month to review some of the basic information available each time you advance a month.

FIGURE 4

Press space bar to continue.

GENERAL ECONOMY



GENERAL ECONOMY

Figure 4 shows a graph of the general economy. The horizontal axis is time, and the vertical axis is an index of economic indicators. Stocks, real estate, and collectibles are particularly influenced by shifts in the general economy. An upward movement in the graph indicates an improvement in the economy.

FIGURE 5

THE FINANCIAL JOURNAL
AUG 1985

ESTIMATED SOYBEAN ACREAGE DOWN 2%..

DIGITAL EQUIPMENT LAYOFFS IMPACT MORALE.

ALLIED CORP. AGREES TO SELL FOUR
EUROPEAN SEAT-BELT FIRMS.

Press B to see last month's news.
Press space bar to continue.

FINANCIAL JOURNAL

Press the SPACE BAR and you will see Squire's Financial Journal (Figure 5). These news messages can signal shifts in the price direction of your investments. As most investments are influenced by multiple factors, a negative news message about Federal Express doesn't mean the stock price will drop for sure. Other factors, such as the general economy, may be having a positive effect on the stock price. The current date is displayed just below "The Financial Journal." If you press B for Backward you can search through previous months' news reports. Go ahead and press B a few times! Now press the SPACE BAR to continue.

PRICE CHANGES

The next screen displayed, as shown in Figure 6, is the monthly price changes. As you move forward each month while playing Squire, the prices of the various investment tools will change. Stock prices will move up or down, yields will change on money market accounts, the value of your collectibles will change, etc.

FIGURE 6

PRICE CHANGES

INVST	TYPE	PRICE	PCHANGE	YIELD	YCHGE
IBM	BCSTK	\$ 129.36	-0.88	4.3%	+0.03
CWE	BCSTK	\$ 20.22	+0.08	5.2%	-0.02
DEC	GSTK	\$ 53.90	-0.42	—	—
FDX	GSTK	\$ 28.33	-1.22	—	—
BAM	ABOND	\$ 1,384	+19	7.3%	—
ALD	ABOND	\$ 1,353	+16	7.2%	—
MGM	BBOND	\$ 1,235	-3	8.8%	—
CRY	BBOND	\$ 1,161	+12	8.2%	—
IRA	IRA	—	—	7.1%	—
\$MARK	\$MARK	—	—	5.9%	-0.07
STMP	COLL	\$ 10,000	0	—	—
SOY	COMD	\$ 523.60	+4.2	—	—
GLD	COMD	\$ 418.00	+2.40	—	—
CA-RS	RE	\$101,680	+1,760	—	—
NY-CM	RE	\$226,200	+5,000	—	—
CA-CM	RE	\$210,600	+3,000	—	—
NY-RS	RE	\$109,200	+2,800	—	—
O&G	O&G	—	—	9.4%	—

Press space bar to continue.

Reading from left to right, the headings in Figure 6 are: the names of your investments (INVST), such as Federal Express stock (FDX); the type of investment (TYPE), such as growth stock (GSTK); the current month's price (PRICE); the change in price since last month (PCHANGE); the current yield (YIELD); and the change in yield since last month (YCHGE).

As you can see, some items, such as growth stock, don't have any yield because they pay no dividends. Others, such as a money market account, have no price listed, (only Yield).

Yield on stocks is calculated by dividing the annual dividend by the price of the stock. Bond yield is the coupon yield (more on this in Chapter 3). The price for collectibles assumes

an arbitrary \$10,000 investment and the price moves with the general economy. You will notice STMP listed when you don't own any collectibles, and the name of your investment when you do own collectibles (e.g. Rugs). The price for soybeans is in cents per bushel, and gold is in dollars per ounce.

The real estate price changes are the changes in the average property price for each of Squire's four real estate types. You can use the proportionate change in these average prices to estimate how the price of the property you own has changed.

Press the SPACE BAR to continue.

FIGURE 7

*** MONTHLY PRE-TAX INCOME SUMMARY ***	
DISP INCOME:	+\$500.00
TOTAL INCOME:	+\$500.00
CHANGE IN CASH:	+\$500.00←

PRE-TAX INCOME

Each month you will receive income from your various investments. As shown in Figure 7, Squire will report these pre-tax income items to you at the beginning of each new month. The only item shown in Figure 6 is the \$500 a week disposable income (Disp. Income). Squire will give you each month. This money represents the portion of your monthly income that you can set aside for making investments. In the reality mode you will be able to set the disposable income to any level you desire. Press the SPACE BAR to continue.

MENUS

We are now back in the command mode but in a new month. Squire uses a tree-structured menu system. This means that when you select a command from the command mode, you will most likely see another menu.

Try pressing D for Descriptions. Figure 8 shows the description menu that will appear on your screen. As you can see, we have a menu under a menu. Any time you want to return to the next highest menu while playing Squire, all you have to do is press the SPACE BAR or, in some cases, just press the RETURN key.

FIGURE 8

*** DESCRIPTION MENU ***

1 — Blue Chip Stock	H — Commodity Market
2 — IBM	I — Soybeans
3 — Comm. Edison	J — Gold
4 — Growth Stocks	K — Collectibles
5 — Digital Equip.	L — Rare Coins
6 — Federal Express	M — Paintings
7 — Class AA Bonds	N — Stamps
8 — Bank of America	O — Oriental Rugs
9 — Allied Corp.	P — Furniture
A — Class B Bonds	Q — Porcelain
B — MGM	R — Real Estate
C — Chrysler Corp.	S — Residential Prop.
D — Oil & Gas	T — Commercial Prop.
E — IRA	U — California
F — Money Market	V — New York
G — Cattle Feeding	

PRESS SPACE BAR FOR MAIN MENU
Enter letter next to description...

DESCRIPTIONS

Now back to the description menu in Figure 8. Prior to investing some of your hard earned money, it is a good idea to study the specific type of investment you are going to make. Let's say you are going to invest money in Oriental rugs. Press the letter O (not zero) to display a description as shown in Figure 9.

When you are done reading, press the SPACE BAR to return to the command mode.

FIGURE 9

ORIENTAL RUGS

Authentic oriental rugs have pile yarns that are hand-knotted onto woven backing. These rugs are made by village and nomadic craftsmen from such countries as China, India, Iran and Turkey. Oriental rugs are considered valuable because they have intricate designs and take a long time to weave. Tightly woven rugs cost the most because they have the greatest durability. The origin of hand-knotted rugs is lost in the midst of time. The Russians found a 2,000 year old rug in a frozen tomb in southern Siberia. Political instability in countries like Iran can cause the rugs to appreciate rapidly. Oriental rugs are like other collectibles: there is always the chance the investor will get walked on.

Press space bar to continue.

FIGURE 10

*****GRAPH MENU*****

- | | |
|-----------------------------|-------|
| 1 — General Economy | |
| 2 — IBM | BCSTK |
| 3 — Commonwealth Edison | BCSTK |
| 4 — Digital Equipment Corp. | GSTK |
| 5 — Federal Express | GSTK |
| 6 — Bank of America | ABOND |
| 7 — Allied Corp. | ABOND |
| 8 — Metro Goldwyn Mayer | BBOND |
| 9 — Chrysler Corp. | BBOND |
| A — Interest Rate | |
| B — Soybeans | |
| C — Gold | |
| D — California Residential | |
| E — New York Commercial | |
| F — California Commercial | |
| G — New York Residential | |

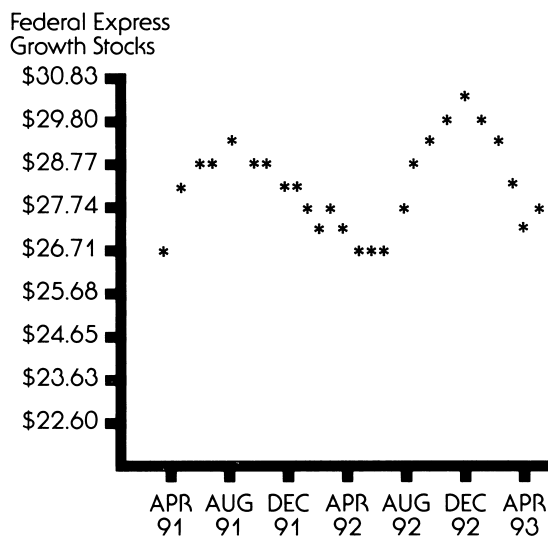
PRESS SPACE BAR FOR MAIN MENU
Enter letter next to graph desired...

GRAPHS

Squire allows you to research the historical price trends of Squire's various investment tools. Press G for Graph and you will see Figure 10 displayed. This is Squire's graph menu.

FIGURE 11

Press space bar to continue.



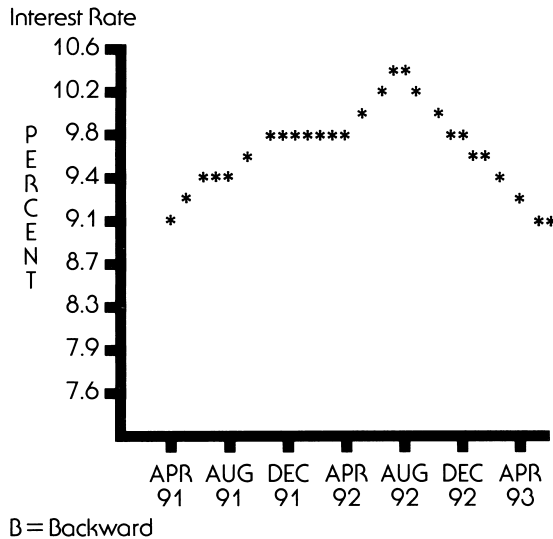
B = Backward

Let's take a look at how Federal Express stock is doing. Press 5 for Federal Express and Figure 11 will appear. In this case, the vertical axis of the graph is the price of this stock. Now press the SPACE BAR to return to the graph menu.

Press A to see a graph of current interest rate trends as shown in Figure 12. Now press the SPACE BAR to return to the graph mode.

FIGURE 12

Press space bar to continue.



18

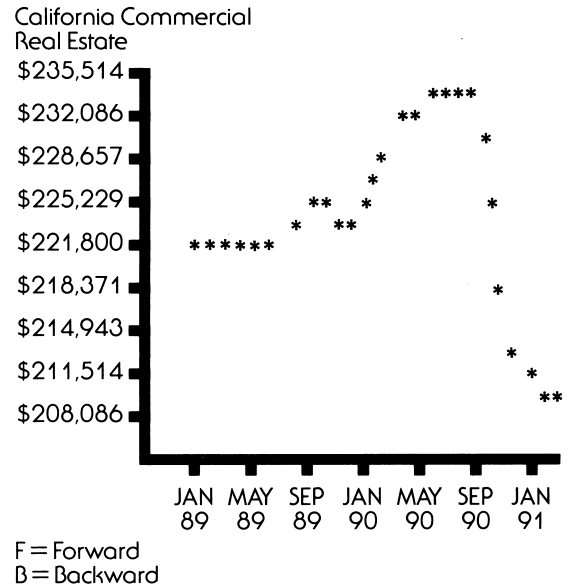
MOVING BACKWARD AND FORWARD

Now press F to see commercial real estate prices in California. If you look at the lower left hand corner of Figure 13, you will see "F=Forward B=Backward." This will not appear on your computer screen yet. When you are past the 27th month of the game, you can scroll the graph backwards and forwards in time by pressing the B or F keys. Squire will display F=Forward or B=Backwards when you are able to use them. Obviously, Squire won't let you scroll the graph into the future, or back before the start of the game. The graphs on Squire are self-scaling. That means that the vertical scale of the graph will change each time you display new data. This is particularly noticeable when using the B or F options while reviewing a graph.

Now press the SPACE BAR to return to the graph menu. Press the SPACE BAR again to return to the command mode.

FIGURE 13

Press space bar to continue.



RETIREMENT STATUS

At various points in the game you may want to review your progress towards retirement. Press R for Retire and you will see Figure 14. This is a summary of all important game statistics, including the various status levels you can achieve while playing Squire. The word "credit" will appear adjacent to Tax Obligation if you have a tax credit rather than an obligation.

FIGURE 14

*** RETIREMENT STATUS ***

NAME: KSK
CURRENT STATUS: SPECULATOR
CURRENT AGE: 40
RETIREMENT AGE: 55

NET WORTH: \$ 415,805
RETIREMENT GOAL: \$1,000,000
CURRENT CASH: \$ 400,451
CURRENT LOANS: \$ 7,741
TAX OBLIGATION: \$ 940

STATUS LEVELS

NOVICE	\$ 70,000
INVESTOR	\$ 100,000
SPECULATOR	\$ 250,000
BROKER	\$ 500,000
SQUIRE	\$1,000,000

Press space bar to continue.

BAR GRAPH

Press the SPACE BAR and you will see Figure 15. This is a bar graph of your net worth over time. The horizontal axis is years and the vertical axis is net worth. This graph is updated every month so you can get a picture of how you are progressing. At the top of Figure 15 Squire indicates the number of years left until you retire. Press the SPACE BAR to return to the command mode.

REVIEWING THE NEWS AND INCOME

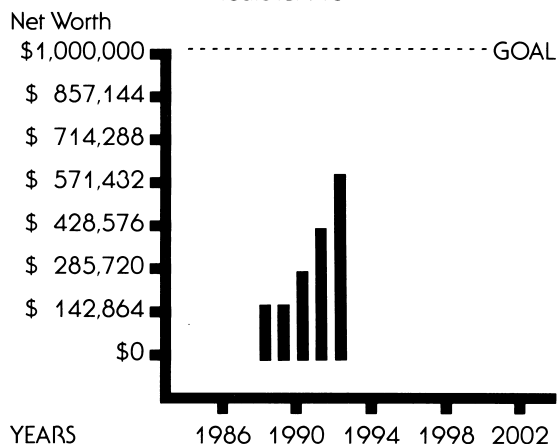
If you would like to review the month's news headlines (Figure 5) or the price changes (Figure 6), press N for News. If you would like to review your monthly pre-tax income again (Figure 7), press C for Cash. Use of the I for Interim option will be discussed in the chapter on the reality mode.

FIGURE 15

Press space bar to continue.

RETIREMENT PROGRESS

Years left: 15



TIME TO BUY

Now it is time to make an investment. Please note that the chapters on each individual investment tool also discuss how to buy and sell that investment type. Press B for Buy and you will see the investment menu shown in Figure 16.

Squire allows you to make investments in eleven general categories. Each of these categories has different risks, income, and tax advantages. When you make an investment, Squire stores the information about the investment in your portfolio. Squire can handle up to 15 separate items in your portfolio. For example, you could invest in Federal Express (growth stock) every month until you fill up your portfolio.

You will notice in Figure 16 that a "WAIT" is adjacent to "5 — IRA." You can only invest \$2,000 each year in an IRA. After you have invested in the current year Squire will display "wait" until a new year rolls around.

FIGURE 16

*****INVESTMENT MENU*****

1 — Blue Chip Stock
2 — Growth Stocks
3 — AA Corporate Bonds
4 — B Corporate Bonds
WAIT 5 — IRA
6 — Money Market
FULL 7 — Collectibles
8 — Commodity Market
9 — Real Estate
A — Oil & Gas
B — Cattle Feeding

PRESS SPACE BAR FOR MAIN MENU
Enter reference number to buy...

You will see a "FULL" next to "7— Collectibles." This is because in Squire you can only own one collectible at a time. When you currently own a collectible Squire will show "FULL" next to item 7.

FIGURE 17

BLUE CHIP STOCKS

REF	STOCK NAME	PRICE	YIELD
1	IBM	\$ 111.32	4.9%
2	Commonwealth Edison	\$ 18.58	5.7%

All stocks are sold on 50% margin.
The interest rate on margins is 8.8%.
Stock dividends are paid quarterly.
You cannot take short positions.

Enter reference number to buy...

Let's try investing some money in blue chip stocks. Press 1 for Blue Chip Stock and Figure 17 will appear on the screen.

As you can see, two Blue Chip stocks can be purchased while playing Squire, IBM and Commonwealth Edison. This screen is discussed in more detail in the chapter on stocks. Let's buy some IBM stock. Notice on the left side of the screen, under the heading REF, are the numbers 1 and 2. We refer to these numbers as reference numbers. Since we want to buy IBM, press the reference number 1. An asterisk (*) appears next to the reference number to indicate your selection. The computer will display the maximum number of shares you can buy and prompt you for the quantity to buy. Enter 100 and press the RETURN key.

FIGURE 18

*****BUY TRANSACTION REPORT*****

IBM

TYPE:	Blue Chip Stock
QUANTITY:	100
PURCHASE PRICE:	\$ 111.32/shr
COMMISSION:	\$ 166.98
LOANS:	\$5,566.00
LOAN INTEREST:	8.8%
YIELD:	4.9%
NET COST:	\$5,732.98←

BUY TRANSACTION REPORT

Squire will now display a buy transaction report. You will receive a buy transaction report every time you make an investment. Reading from top to bottom in Figure 18 we have: the name (IBM) and type (blue chip stock) of investment you made, the quantity you purchased, the purchase price per share, the brokerage commissions you paid, the margin loan you took out, the interest rate on your loan, the yield (i.e. dividends), and the net cost. Net cost is the cash out of your pocket.

COMMISSIONS

Commissions with regard to taxation are handled differently in Squire than in the real world. Normally when you buy an investment, the commission is taken as a short-term loss (deduction) in the year of the transaction. In Squire, the tax implications of buy commissions is taken into account when you sell your investment. This results in one odd characteristic —if the investment receives long-term gain or loss treatment, so will the total commission costs.

Press the SPACE BAR and you will be returned to the investment menu. Now press the SPACE BAR again, and you will be returned to the command mode.

FIGURE 19

*** YEAR TO DATE TAX STATUS***

SHORT-TERM GAINS:	\$5,266
SHORT-TERM LOSSES:	\$4,130
LONG-TERM GAINS:	\$ 0
LONG-TERM LOSSES:	\$ 0
IRA PENALTY:	\$ 0
TAX OBLIGATION:	\$ 340

TAXES

Your strategy while playing Squire should be to pay as little income tax as possible. Press T for Tax in the command mode and you will get a complete summary of your current tax situation. Figure 19 shows your year-to-date tax status. A summary of your long- and short-term gains and/or losses is displayed along with how much tax you would have to pay if today were the end of the year. If you have a

tax credit, the word "credit" will appear adjacent to tax obligation. Squire uses the term "tax credit" to refer to many items in the real world that are taxable deductions. If you have sold off part of your IRA investments, the amount of your penalty will be displayed. Now press the SPACE BAR and you will see Figure 20.

FIGURE 20

TAXES IF SOLD

INVT	TYPE	QUANTITY	TAX IF SOLD
IBM	BCSTK	100	\$ 93 Credit
IBM	BCSTK	100	\$ 51 Credit
FDX	GSTK	1	\$ 1 Credit
FDX	GSTK	10	\$ 11 Credit
FDX-S	GSTK	100	\$ 101
IRA	IRA	1	\$1,244
\$MARK	\$MARK	1	\$ 0
PORC	COLL	1	\$ 150 Credit
TAX OBLIGATION:			\$ 340

Figure 20 is a summary of the taxes that would be incurred if you sold the various items in your portfolio today. The most effective use of this information is to use it each December before taxes are due to minimize taxes. For instance you may have a big tax credit in December. You could sell investments that have a profit and your tax credit would shelter that profit from taxes. Note that if your portfolio is empty Figure 20 will not be displayed. Press the SPACE BAR to return to the command mode.

NEXT MONTH

Now that we have made an investment, we can move on to the next month. As in the

real world, when you move ahead in time, the value (prices) of your various investments will change. A fast way to do this is to press Q for Quick. Go ahead, try it! Squire will only display critical information, such as margin calls, before returning you to the command mode in the new month.

A second way to advance a month is to press M for Month in the command mode. When you press M, Squire will display a graph of the general economy, a graph of each investment you own, the Financial Journal, and the monthly price changes. In addition to this, numerous other things can happen when you advance to a new month.

FIGURE 21

*** 1990 INCOME TAX REPORT ***

SHORT-TERM GAINS:	\$8,455
SHORT-TERM LOSSES:	\$4,295
NET SHORT-TERM GAIN:	\$4,160
LONG-TERM GAINS:	\$ 0
LONG-TERM LOSSES:	\$ 309
NET LONG-TERM LOSSES:	\$ 309
TAX OBLIGATION:	\$1,201 ←

PAYING TAXES

In January every year you must pay federal income taxes. In Squire you cannot carry forward a tax loss. Your tax obligation will be zero if your short-term and long-term losses and gains result in a tax credit. Reading from top to bottom in Figure 21 we have: a summary of your short-term investments, a summary of your long-term investments, and the taxes you must pay.

As previously indicated, each month (if you use M) you will receive a summary of your pre-tax income (Refer to Figure 22).

FIGURE 22

*** MONTHLY PRE-TAX INCOME SUMMARY ***

Blue Chip Stock:	−\$ 3.58	Div-Int
Growth Stocks:	−\$ 47.55	Int pay
IRA:	+\$ 14.83	Int
Money Market:	+\$ 30.45	
Disp. Income:	+\$500.00	
TOTAL INCOME:	+\$494.15	
CHANGE IN CASH:	+\$448.87	←

Some of this income, such as bond interest, goes right into your pocket. Other portions of your pre-tax income, such as money market interest, accumulate in your money market account. Squire shows you both your total income, and your change in cash, since these may not be the same values. Some types of investments may actually drain your cash, such as growth stocks that pay no dividends, but require you to make interest payments on your margin loan. (More on this in the chapter on stocks.)

FIGURE 23

*** SPECULATOR ***

You have reached a new milestone in your efforts to reach your retirement goal.
You are 25% of the way there.

When you reach new milestones during your progress towards retirement, Squire will congratulate you and award you a new status, as shown in Figure 23.

If your monthly pre-tax income is negative and you run out of cash, you will be forced to sell off some of your investments before entering the command mode (See Figure 24). If you sell something with a big penalty that drops your net worth below \$3,000, you will go bankrupt.

FIGURE 24

***** FORCED SALE *****

Your monthly expenses have exceeded your available cash. You must sell off some of your investments before going on. When you press the space bar you will be in the sell mode.

CURRENT CASH: -\$1,815

While playing in the default mode, Squire may present you with unexpected events that alter your financial condition. These can be both good and bad, as shown in Figure 25. The unexpected events that bring you money will be taxed as short-term gains. Those unexpected events that cost you money will have no tax benefit.

The chapters on the individual investment tools will discuss many other screens that may appear when you go to a new month.

FIGURE 25

Always a gambler at heart, you decide to invest your savings in Las Vegas. For once in your life you come out a winner with \$12,000 in winnings.

Press the SPACE BAR until you return to the command mode. Press S for Sell and you will see a display of your investment portfolio as shown in Figure 26. Your portfolio can also be displayed by pressing the P for Portfolio option in the command mode. To see a detailed portfolio report, just press the reference number to the left of each portfolio item. As you can see from Figure 26, you can make many purchases over time of the same stock, commodity, or other investment.

FIGURE 26

***** INVESTMENT PORTFOLIO *****

R	INVST	TYPE	QTY	PURCHASE	CURRENT
1	IBM	BCSTK	100	\$115.83	\$111.32
2	IBM	BCSTK	100	\$111.32	\$111.32
3	FDX	GSTK	1	\$ 35.17	\$ 28.01
4	FDX	GSTK	10	\$ 35.17	\$ 28.01
5	FDX-S	GSTK	100	\$ 35.17	\$ 28.01
6	IRA	IRA	1	\$ 4,000	\$ 4,146
7	\$MARK	\$MARK	1	\$ 5,010	\$ 5,280
8	PORC	COLL	1	\$ 5,000	\$ 5,000

PRESS SPACE BAR FOR MAIN MENU
Enter number next to investment ...

FIGURE 27

***** DETAIL PORTFOLIO REPORT *****

IBM

Equity: 50.0%

TYPE:	Blue Chip Stock	
DATE PURCHASED:	JUN 1990	
QUANTITY:	100	
PURCHASE PRICE:	\$ 111.32	/shr
CURRENT PRICE:	\$ 111.32	/shr
LOANS/MARGIN:	\$5,566.00	8.8%
ANNUAL YIELD:	4.9%	
PRE-TAX INCOME:	\$ 4.90	Month
AFTER-TAX INCOME:	\$ 4.90	Month
COMMISSION IF SOLD:	\$ 166.98	
PENALTY IF SOLD:	—	
LOSS IF SOLD:	\$ -168.65	Short
TAXES IF SOLD:	\$ 50.59	CR
CASH IF SOLD:	\$5,399.02	←

Enter number of shares to sell? 50

** Your sale has been completed.***

Figure 27 is Squire's detailed portfolio report screen. This will be displayed for each investment you own when selling, or just examining your portfolio. Not all the headings on the report are appropriate for each type of investment. If a heading is not appropriate dashes will be displayed, as in penalty if sold in Figure 27. The descriptions of the detail portfolio will be described more fully in the chapters for each specific investment tool. In general, the top third of the screen reports information about price, quantity, and loans. The middle third of the screen reports monthly income information. The bottom third of the screen reports what would happen if you sold this investment today. Let's sell 50 shares of stock. Enter 50 and press the RETURN key. A brief message at the bottom of the screen says "Your sale has been completed." Note that you can sell off part of your holdings (even just 1 share if

FIGURE 28

*** RETIREMENT SUMMARY ***

You wanted to retire when you turned 55 with an annual income of \$80,000. This required you to accumulate a net worth of at least \$1,000,000 at the time of your retirement.

You are now 44 years old and you managed to accumulate a net worth of \$449,269. This will provide you with an annual income of \$35,942.

You missed your retirement goal by a long way. You are in for a hard life.

Press space bar to continue.

you want). If you had decided not to sell any stock at all, you could have just pressed the RETURN key and you would have been returned to the investment portfolio screen (Figure 26). Now press the SPACE BAR to return to the command mode.

There are many ways to end a game of Squire. You may go bankrupt, achieve your retirement goal, reach retirement age, or just tell Squire you want to quit by using the E for End command. In each case a retirement summary report will be displayed showing how you did during this session of Squire. Refer to Figure 28.

You can also use the E for End command to save a game that is currently in progress. Any previously saved game will be destroyed because Squire can store only one saved game at a time. Squire will save all the items in your portfolio along with the complete economic environment in a save file. When you start up Squire the next time, you can select the saved option from the opening screen (Figure 1) to finish playing the game. Please note that when you save a game the player directory is updated.

If you were playing in the reality mode, Figure 28 will tell you how many interim goals you managed to achieve.

This completes the chapter on game playing basics. We suggest that you start playing Squire in the default mode now and, as you decide to invest in each type of investment tool, refer to the appropriate chapter to learn how the market works and how to buy and sell that investment. When you have a thorough understanding of all the investment tools, try playing in Squire's reality mode.

CHAPTER 3

WHAT IS A STOCK?

Stock is a piece of the action or, more precisely, a portion of the corporation. In order to raise money — working capital to build factories, fund research, etc. — a corporation sells shares. These shares are “stock” in the company. Individuals who purchase stock become part owners of the company.

How much of a company each shareholder owns depends not upon how many shares you purchased, but upon the proportion of those shares to the total number of shares issued by the company. An investor who owns 100 shares of a company with 1,000,000 shares outstanding owns a smaller part of a company than an investor who owns only 10 shares of a company with just 100 shares outstanding.

STOCK EXCHANGE

Stock owners can usually resell their stock through a stock exchange, which is simply a place where representatives of buyers and sellers — called brokers — meet and negotiate prices. Stock prices are determined by several factors, including: the company’s current profits, anticipated future profits, the value of assets (factories, patents, real estate, etc.), and cash on hand.

If a company’s prospects are optimistic, then its stock will be in demand and the price will rise. Conversely, if prospects are dim, the stock price will drop.

Why would you buy stock in a company? Long-term investors hope to receive a portion of the corporate profits, called dividends. Furthermore, such investors hope for the price of the stock to increase as the size of the company grows. In real life there are also many tax incentives to investing money in corporations.

SPECULATORS

On the other hand, there are those who look to make a profit in a shorter period of time. By “hopping on the bandwagon” of a stock that has a rapid upward change in price (for a variety of possible reasons), the investor can make a substantial windfall profit. This is considered “speculation.”

Speculators are the ones who sometimes “get rich quick.” In order to do so, of course, they must accept much more risk than the long-term investor is generally willing to accept.

FACTORS THAT INFLUENCE YOUR DECISION

In order to minimize risks, a speculator looks at many factors to determine which way a stock price is likely to go. The following factors can influence the market:

1. **THE PROFITABILITY OF A CORPORATION.**
Normally announced every three months in an earnings statement. Profits are referred to as “earnings.”
2. **CHANGES IN THE NUMBER OF SHARES TRADED ON THE STOCK EXCHANGE.** Sudden increases in stock sales can signal a significant price change is imminent. This may be due to “insider trading” (shares sold by company officials who may know more than the general public), or large trades by institutional investors.
3. **NEWS ANNOUNCEMENTS ABOUT A COMPANY.** These can have a dramatic effect on a company’s stock price.
4. **STOCK PRICE TRENDS.** Analyzing the stock price fluctuations over time can give clues to future performance. History tends to repeat itself.
5. **INDUSTRY GROUP TRENDS.** Looking at a single industry can yield clues not visible in a single stock’s price fluctuations. Certain factors will affect an entire industry, and this will be reflected in the price of individual corporate stocks.

EXAMPLE: A harsh winter storm immediately prior to the Christmas season will have a dramatic effect on the retail industry because shoppers won't go to stores in poor weather. This factor would affect most companies in the retail industry group.

6. **STOCK MARKET TRENDS.** Stocks sometimes seem to have a life of their own that can cause individual stock prices to move illogically. The market goes through cycles: when stock prices generally rise, it is referred to as a "bull market." When they fall, a "bear market."

7. **DAILY STOCK PRICE.** Daily changes in stock prices, new highs or lows, are the key to many buy and sell decisions.

After analyzing all these factors (no simple task, obviously, or we'd all be rich), a speculator looks for a stock that can be expected to experience a rapid change in price. (It need not be an upward change in price, by the way, which will be explained later.)

BUYING ON MARGIN

If the buyer has made arrangements with a broker, the stock may be purchased on credit. This is called margin buying. In such a transaction, the buyer must normally make a down payment of at least 50% of the value of the stock, and the broker extends credit to the buyer on balance. If a stock purchased on margin goes down rather than up, the broker may "call" the margin. This forces the speculator to come up with enough money to return his equity to the 50% level (by paying off part of the margin loan).

In Squire, a margin call occurs when the speculator's equity drops below 30%. The obvious advantage of buying on margin is that you pay only a portion of the total price while your broker extends credit to you on the balance. Of course, you must pay interest on the margin loan (except on short sales).

THE STOCK OPTION

Options are simply the right to buy or sell shares of a stock (usually in "lots" of 100) at a price agreed upon in advance (called a striking price). Options are extended only for a limited period of time, and automatically decline in value as the expiration date for the option approaches. An expired option is worthless.

There are two types of options: "put" options, and "call" options. The call option is the right to purchase stock for a previously agreed upon price. The put option is the right to sell stock for a previously agreed upon price. The rise of a stock's price causes a call option to increase in value and a put option to decrease in value.

EXAMPLE: In June, K-Mart stock is trading for \$50.00 a share. You pay \$1.00 for each \$55.00 call option that expires in September. In July the price of K-Mart stock is unchanged, but your option is now worth only \$.70 as the expiration date is one month closer. In August the price of K-Mart stock jumps to \$60.00 a share. Since your options entitle you to buy stock at \$55.00, you could exercise your option, buy K-Mart stock at \$55.00 per share, and resell it for \$60.00 per share. Your profit would be \$5.00 per share less the initial option price. In reality, options are seldom exercised but are sold to other speculators. In this example, when K-Mart jumped to \$60.00, the price of the option would have increased to around \$5.50, and could have been sold for a profit of \$4.50 per option (\$5.50 sale price minus \$1.00 purchase price).

EXAMPLE: In June K-Mart is trading for \$50.00 per share. You pay \$1.00 for each \$45.00 put option that expires in September. If the price of K-Mart stock rises to \$60.00 the next day, the value of the option will drop to around \$.80 because the stock price is now \$15.00 away from the striking price (\$45.00). In August the price of K-Mart stock drops to \$35.00 per share, and your K-Mart options

jump to \$10.50 per option. Savvy investor that you are, you sell and pocket the hefty profit.

As these two examples illustrate, a call option is purchased when you believe the stock price will rise significantly. A put option is purchased when you believe the price will fall significantly.

Sometimes options are used for protection. For example, if you purchase shares of Dow Chemical at 120, you might purchase an equal number of put options enabling you to sell Dow Chemical at 100. This is "insurance" that protects you against catastrophic loss.

However, options are primarily used for speculation. If you believe a stock will rise or fall dramatically, the lower price of options will permit you to "control" far more shares (and potential profit) than if you bought the shares outright. This is called "leverage."

LEVERAGE

In speculative investing you wish to get the most leverage possible, that is, to control as many shares of stock as possible given your current resources. \$100 worth of options gives you greater leverage than \$100 worth of stocks because you control more shares (since options trade at a fraction of the price of the stock). Borrowing money to purchase options increases your leverage even further by permitting you to control stock with very little of your own money.

The more leveraged you are, the greater the risk, of course. A small downward price fluctuation that might prove a minor annoyance to the owner of stock may spell doom to the highly leveraged investor, collapsing what is basically a house of cards.

SELLING SHORT

Another technique of leveraging is called "selling short." A short seller who believes the price of a stock will fall dramatically "borrows" the stock from another investor for a fee. The short seller then sells the stock and banks the

receipts. When the stock falls in price, the short seller buys it on the open market and returns it to the original investor, pocketing the difference in price as profit. Of course, if the stock should rise in price, the short seller must make up the difference when replacing the stock. Note that the short stock may be "bought" on margin and no interest is charged on the margin amount. The handling of short sales in Squire differs considerably from the real world, although the profit made on a short sale transaction is accurate.

When you buy or sell stock through a broker, the broker takes a percentage of the total transaction as his commission. In Squire, commission is 1.5% of the total transaction value.

Nothing escapes the clutches of Uncle Sam, and that goes for money made in the stock market. The amount of tax owed depends on an individual's tax bracket. In general, short-term profits (from stocks held less than 6 months) are taxed at twice the rate of long-term profits (on stocks held at least 6 months). Losses reduce the tax burden by the same proportions.

Squire allows you to trade four different stocks: two blue chip and two growth stocks. The blue chip stocks pay dividends, and the growth stocks can be traded short.

If you would like to learn more about the stock market, buy Millionaire, Blue Chip Software's stock market simulation. Millionaire provides a well-focused and complete environment for understanding stock market principles. What's more, Millionaire is one of the most entertaining games around. It has rated among the top ten entertainment games for over a year. It allows you to trade 15 stocks in five industry groups. Both call and put stock options are available.

HOW TO TRADE STOCKS IN SQUIRE

Squire allows you to purchase both blue chip and growth stocks. All stocks are purchased on 50% margin, and you must make interest payments quarterly on your margin loans (except shorted stocks). Blue chip stocks pay dividends quarterly, but you will receive no dividends on growth stocks. You can trade short in growth stocks but not in blue chip stocks.

BUYING STOCK

To purchase blue chip stocks, select Buy from the command mode, then Blue Chip Stock from the investment menu. You will see Figure 29 displayed.

FIGURE 29				
BLUE CHIP STOCK				
REF	STOCK NAME	PRICE	YIELD	
1	IBM	\$119.13	4.6%	
2	Commonwealth Edison	\$ 20.36	5.2%	

All stocks are sold on 50% margin.
The interest rate on margin is 11.0%.
Stock dividends are paid quarterly.
You cannot take short positions.

Enter reference number to buy...

Reading from left to right we have: the reference number, the name of the stock, the current stock price, and the stock's yield. Yield is the annual dividend divided by the current stock price. Dividends are paid quarterly on blue chip stocks, and you may only trade long positions in blue chip stocks. Because both your margin interest payments and dividends are due in the same month of each quarter, you can wind up with interest payments being greater than dividends if interest rates are high.

Squire will ask you to select the reference number for your purchase. Press 1 or 2 for IBM or Commonwealth Edison. Next Squire will display the maximum number of shares you can buy, and will ask you how many you would like to buy. Once you have entered the number of shares you would like to buy, a sale transaction will be displayed. When purchasing or selling stocks, you must pay a 1.5% commission on the total transaction value.

FIGURE 30				
GROWTH STOCKS				
REF	STOCK NAME	PRICE	YIELD	
1	Digital Equipment Corp.	\$85.47	—	
2	Federal Express	\$34.49	—	
All stocks are sold on 50% margin. The interest rate on margin is 11.0%. There are no stock dividends paid. You can sell growth stocks short.				
Maximum number you can buy: 3209				
Do you want to sell short (Y or N)...				

If you would like to buy growth stocks, select Growth Stocks from the investment menu. You will see Figure 30 displayed. Two growth stocks may be purchased, Digital Equipment and Federal Express. As with blue chip stocks, these are purchased on 50% margin, but growth stocks don't pay dividends.

You can sell growth stocks short. This means that you can make an investment in growth stocks in which you make money if the price goes down. When you select growth stocks, you will first be asked if you want to sell short. If you want to make a normal long investment,

answer N for No. Next you will be asked to enter the number of shares you would like to buy. After your answer you will receive a buy transaction report.

If the value of your stock changes so that your equity (the difference between the value

FIGURE 31

MARGIN CALL

DIGITAL EQUIPMENT CORP.
Quantity: 100

The value of your stock has dropped to the point that your equity is below 30%. Your equity is now being brought up to 50% by paying off some of your margin loan. Your margin loan has been reduced by: \$1,418.

of your stock and your margin loan) drops below 30% of your loan, Squire will call your margin account (Figure 31). Money will be taken to pay a portion of your margin loan so that your margin loan represents no more than 50% of the stock's value. Remember that when you own stocks with a short position, your equity will drop as the price of the stock rises.

EQUITY

As you advance each month you should keep an eye on the equity you have on various stocks (above 50% is good, below 50% is bad). Once a quarter (March, June, September, and December) your blue chip stocks will pay dividends. During the same months, interest on margin accounts must be paid for both blue chip and growth stocks except for short positions.

SELLING STOCKS

When you want to sell your stocks, you select Sell from the command mode and then Blue Chip or Growth Stocks from your investment portfolio.

FIGURE 32

DETAIL PORTFOLIO REPORT

IBM
Equity: 49.1%

TYPE: Blue Chip Stock
DATE PURCHASED: FEB 1986
QUANTITY: 100
PURCHASE PRICE: \$ 115.83 /shr
CURRENT PRICE: \$ 113.85 /shr
LOANS/MARGIN: \$5,791.50 12.7%

ANNUAL YIELD: 4.8%
PRE-TAX INCOME: \$ -15.52 Month
AFTER-TAX INCOME: \$ -15.52 Month

COMMISSION IF SOLD: \$ 170.77
PENALTY IF SOLD: -
LOSS IF SOLD: \$-370.51 Long
TAXES IF SOLD: \$ 55.58 CR
CASH IF SOLD: \$5,422.73 ←

Enter number of shares to sell?

Figures 32 and 33 show the detailed portfolio reports generated for blue chip and growth stocks respectively. Reading from top to bottom we have: the name of the stock, your equity position, the investment type, the quantity you purchased, the purchase price per share, the current price per share, the amount and interest on your margin loan, the yield, pre-tax and after-tax income, and the commission/gain/taxes/cash if sold.

In Figure 32 the pre-tax income is the difference between the dividend payment and margin interest per month. In Figure 32 your interest payments are greater than your dividends. Therefore, you will have to pay \$46.56 (3x\$15.52) a quarter. As dividends are considered ordinary income and margin interest

FIGURE 33

***** DETAIL PORTFOLIO REPORT *****

FEDERAL EXPRESS

Equity: 58.4%

TYPE:	Growth Stocks	
DATE PURCHASED:	MAR 1986	
QUANTITY:	100	Short
PURCHASE PRICE:	\$ 35.17	/shr
CURRENT PRICE:	\$ 30.13	/shr
LOANS/MARGIN:	\$1,758.60	0.0%
ANNUAL YIELD:	—	
PRE-TAX INCOME:	—	
AFTER-TAX INCOME:	—	
COMMISSION IF SOLD:	\$ 45.20	
PENALTY IF SOLD:	—	
GAIN IF SOLD:	\$ 458.27	Long
TAXES IF SOLD:	\$ 68.74	
CASH IF SOLD:	\$2,217.40	←

Enter number of shares to sell?

payments offset ordinary income, the pre-tax and after-tax income are identical. In growth stocks (long positions) your pre-tax income will consist of interest payments only.

In Squire both your dividend and interest payments are prorated if you don't hold the stock for the entire quarter.

If you are holding growth stocks with a short position the word short will be adjacent to the quantity of shares you own, as shown in Figure 33. In the overall investment portfolio (Figure 26) short stocks have a "—S" appended onto the stock name.

Stocks receive long-term gains tax treatment if you hold them for 6 months. If you sell a stock, the word "long" or "short" will appear adjacent to the loss (or gain) in the detailed portfolio report to indicate the investment's tax status (Figures 32 & 33).

When making stock market investments, remember that blue chip stocks tend to be less volatile than growth stocks. Stocks in general are influenced by the general economy and actions of the specific company.

Blue chip stocks are a moderate risk with relatively low yield and are easy to liquidate.

Growth stocks represent a greater risk because of their more volatile price movement. They generate no income, but are also easy to liquidate.

One interesting thing to try on growth stocks is to purchase both long and short positions on the same stock (called a straddle). When the price rises, sell your long position and when it drops, sell your short position.

Have fun playing the stock market.

CHAPTER 4

CORPORATE BONDS

When you buy a bond you are lending money to a corporation. In return for lending it money, the corporation gives you a certificate, called a bond, promising to pay you interest until the loan is repaid. The date the loan is to be repaid is specified on the bond certificate, usually 5 to 40 years from the date of issue.

Bonds are issued in \$1,000 notes and the interest payments are based upon the \$1,000 face value, regardless of what the current market value of the bond is. For instance, if you buy a bond yielding 10% interest for \$500, you will still receive \$100 interest a year (10% times \$1,000). Interest payments are normally made every 6 months.

The reason bond prices change is that the value of the bond is directly related to current interest rates. If current market interest rates are 10%, then a bond yielding 12% will become more desirable causing its price to rise. On the other hand, if market interest rates go above 12%, that same bond will be less attractive and its price will fall. More simply, as interest rates decline, bond prices rise, and as interest rates rise, bond prices drop. A bond purchased at more than \$1,000 is said to be purchased at a premium, and a bond purchased below \$1,000 is said to be purchased at a discount.

BOND RATINGS

The amount of interest paid on a bond when it is issued depends on the health of the company that issues the bond is. The following rating system is used for bonds.

- AA — High quality
- A — Upper medium
- BAA — Medium
- A/1 — Strong investment
- BA — Uncertain
- B — Questionable

A company with a B rating will have to pay a higher interest on their bonds than a company rated AA. A questionable company (rated B) might default on interest payments. Because more risk is involved, the B rated company must offer something extra to attract investors.

Bonds rated A or better reflect current interest rates exclusively. As interest rates rise, these bond prices drop proportionately. Further down the scale, bond prices are more closely attuned to business conditions in general, and the quality of the issuing corporation. For instance, a B bond price may be influenced by an earnings statement from the issuing corporation. Changes in bond ratings reported by Moody's or Standard and Poor's can reflect drops in a corporation's health.

Corporate bonds are usually unsecured and are backed up by the general credit standing of the issuing company. The investor should look into the corporation's abilities to pay both annual interest plus the principle sum when due.

BOND INTEREST

The interest rate paid on the \$1,000 face value is called the "coupon rate." The term coupon comes from actual coupons, or bearer bonds, that were clipped every 6 months and sent in to the corporation in order to receive interest payments. Today most bonds are registered just like stocks, and interest payment checks come in the mail every 6 months, just like stock dividends.

Another way to look at the interest rate on bonds is to calculate the "current yield." This is the annual interest payment divided by the current price of the bond. If the bond is purchased at a premium, then the current (actual) yield will be lower than the coupon's yield.

EXAMPLE: If you purchase a bond with a coupon yield of 10% for \$1,200, the actual yield would be $\$100/\$1,200 = 8.3\%$. Note that the actual yield fluctuates every time the price of the bond changes.

BOND QUOTES

Bond quotations can be rather confusing to read. An example from a local paper would be:

<u>ISSUE</u>	<u>CURRENT YIELD</u>	<u>LAST</u>	<u>NET CHG.</u>
ATT 8% '86	12.0	70%	+ 4%

Under "issue" we have an AT&T bond with a coupon rate of 8% annual interest due in 1986 (i.e. in 1986 the corporation will repay the \$1,000 loan). The current yield is 12.0%. Under "last" we have the last price the bond traded at during the day. The price of the bond is divided by 10, and the decimal portion is converted to a fraction. In this example, 70% is a bond price of \$737.50. To the right, under "net change" is the price change since the previous trading session. As before, the change of +4% would be an increase of \$4.75.

BROKER

You purchase bonds through a broker just as you would stocks. As with stocks, you will have to pay the broker a small commission every time you buy or sell bonds. Commissions are typically 1% of the transaction value.

PRORATED INTEREST

When you purchase a bond, you must pay the previous owner prorated interest payments. When you sell a bond, you will receive prorated interest payments. If you buy a bond 3 months into a 6-month payment cycle, you will have to pay 3 months' accumulated interest to the previous owner.

As with stocks, bonds can be purchased on margin. Margin is a loan that your broker extends to you to pay for a portion of the bonds. This is generally 33% of the purchase price. Remember that interest must be paid on the margin loan.

INTEREST INCOME

One reason to purchase bonds is to receive the interest income. With a high-grade bond, you can be assured of a steady fixed income regardless of what fluctuations occur in interest rates or the bond market. One major disadvantage of corporate bonds is that the interest income is taxed as ordinary income (30% to 50%). Some types of bonds can be purchased on which the interest income is tax-exempt (e.g. municipal bonds).

In a market where interest rates are volatile, bonds can be a good speculative investment. Very wide fluctuations in the price of a bond may occur as interest rates change. If you can correctly anticipate the movement of interest rates, you can make a great deal of money on the increasing value of bonds in a declining interest rate market. The bond interest payment is a bonus.

TAX TREATMENT

An investor who holds bonds for at least 6 months before selling them will receive long-term gains tax treatment. This means that any profits will be taxed at around 15% rather than the 30% to 50% ordinary income rate.

The date a bond is repaid is referred to as the maturity date. As a bond ages towards the maturity date, its market value increases (or decreases) until, at maturity, it is worth the original face value (\$1,000).

Since bond prices are high in a low-interest market and low in a high-interest market, the trick is to purchase sound corporate bonds when the market interest rate peaks, and sell them when interest rate dips.

In Squire you can trade two types of AA bonds and two types of B bonds. Bond interest is paid semi-annually and you are not allowed to purchase bonds on margin. The first interest payment is prorated according to when you purchased the bond. When you sell a bond you will not receive prorated interest.

HOW TO TRADE BONDS IN SQUIRE

The primary difference between AA bonds and B bonds is that B bonds are more risky. Because of their greater risk, the bond price movement is more volatile and the company issuing the bond must pay higher interest to attract purchasers.

FIGURE 34

AA CORPORATE BONDS

REF	BOND NAME	PRICE	COUPON YIELD
1	Bank of America	\$ 953	6.7%
2	Allied Corp.	\$1,053	7.4%

Bond interest is paid semi-annually.
Enter reference number to buy...

FIGURE 35

B CORPORATE BONDS

REF	BOND NAME	PRICE	COUPON YIELD
1	Metro Goldwyn Mayer	\$1,038	9.9%
2	Chrysler Corp.	\$ 951	9.1%

Bond interest is paid semi-annually.

Maximum number you can buy: 54

Enter number of bonds to buy? 1

BUYING BONDS

To purchase bonds in Squire select Buy from the command mode and then select AA or B Bonds from the investment menu. Figures 34 and 35 show the screens for purchasing AA

and B bonds respectively. Reading from left to right we have: the reference number used to select the specific bond you want to purchase, the name of the company that issues the bond, the current bond price, and the coupon yield rate.

Once you select the specific company's bond to purchase, Squire will display the maximum number of those bonds you can buy and will prompt you to enter the number of bonds you want. Enter the number of bonds you want and a buy transaction report will be displayed.

Bonds are not sold on margin in Squire. Whenever Squire refers to "bond yield," it means coupon yield (yield on the face value). You must pay a 1% commission on all buy and sell transactions involving bonds.

When you advance to a new month, bond prices will change with market interest rates and, to a limited degree, with the actions of the specific company (particularly B bonds).

Squire pays bond interest in June and December. You will see this payment appear in the pre-tax income summary. In real life, bonds have due dates and can be called early. In Squire, the bonds do not have due dates and cannot be called early. In real life, bond interest is normally prorated when a bond is bought or sold. In Squire, bond interest is prorated at the first payment but you receive no prorated interest on a sale. Therefore, watch the timing of your bond sales. Bond yields are based on a \$1,000 base price. All bond interest is taxed as a short term gain or loss. The bond price reflects the difference between the yield and money market interest rates.

If you hold a bond for at least 6 months, it can receive long-term tax treatment.

FIGURE 36

*****DETAIL PORTFOLIO REPORT*******CHRYSLER CORP.**

TYPE:	B Corporate Bonds
DATE PURCHASED:	JUL 1987
QUANTITY:	10
PURCHASE PRICE:	\$ 896.00 /bond
CURRENT PRICE:	\$ 927.00 /bond
LOANS/MARGIN:	—
ANNUAL YIELD:	9.1%
PRE-TAX INCOME:	\$ 76.24 Month
AFTER-TAX INCOME:	\$ 76.24 Month
COMMISSION IF SOLD:	\$ 92.70
PENALTY IF SOLD:	—
GAIN IF SOLD:	\$ 208.34 Short
TAXES IF SOLD:	\$ 62.50
CASH IF SOLD:	\$9,177.30 ←

Enter number of bonds to sell?

SELLING BONDS

To sell your bonds, select Sell from the command mode and, then the specific AA or B Bonds from your investment portfolio.

As shown in Figure 36, Squire will display a detailed portfolio report for your bonds. The reports will be virtually identical for AA and B bonds.

Reading from the top down, we have: the bond name, investment type, date purchased, quantity purchased, purchase price per bond, and current price per bond. Next we have the

yield, and pre-tax and after-tax monthly income. This income is your bond interest. As bond interest is taxable, your pre-tax and after-tax income is identical. To find out the size of your semi-annual interest payment, multiply the pre-tax income number by 6.

Below the income items, we have: commission if sold, gain if sold, taxes if sold, and cash if sold. If your bonds have been held for 6 months, "long" will appear adjacent to "gain if sold." If your "tax if sold" is a credit, a CR will appear.

Enter in the number of bonds you would like to sell and press RETURN.

AA bonds represent a low yielding, low risk, easy-to-liquidate investment. The B bonds represent a moderate yielding, moderate risk, easy to liquidate investment. The greatest danger to a bond purchaser is a sudden increase in interest rates, which can send bond prices plummeting.

Bonds offer you a chance to receive a steady income along with the possibility of a substantial increase in the value of the bond.

IRA

An IRA is an Individual Retirement Account. Recent tax laws permit investors to deposit up to \$2,000 per person each year. The contribution to your IRA can be deducted from your current taxable income. This allows you to invest in your retirement using pre-tax dollars rather than money that has had 30% to 50% taxes deducted. Your contributions, including accumulated interest, are not taxable until the funds are withdrawn at retirement. Money in your IRA may be invested in a variety of ways ranging from T-Bills to commodities. The investor should try to obtain the highest interest rate possible on an IRA, commensurate with the degree of safety desired. You may shift your IRA funds from one type of investment to another without incurring a penalty. If you withdraw your IRA funds, you will be subject to a 10% fine, plus your contributions and interest earned become taxable as ordinary income. Consistently making IRA contributions over many years can lead to a healthy retirement nest egg.

In Squire you may invest \$2,000 a year in an IRA and the IRA interest rates float just above money market rates. The penalty for early withdrawal is the same as in real life (10%).

HOW TO INVEST IN AN IRA WHILE PLAYING SQUIRE

To make an IRA investment you select Buy from the command mode, and then IRA from the investment menu. Figure 37 shows the IRA buy screen. If you want to make an IRA investment of \$2,000, you just press Y for Yes. When you return to the investment menu you will notice a "wait" next to IRA. This will remain until a new year rolls around and you can make another IRA contribution.

FIGURE 37

INDIVIDUAL RETIREMENT ACCOUNT

Required investment is \$2000.

Current interest rate: 9.4%

The money you invest in an IRA and the accumulated interest will not be taxed until after you retire. If you withdraw money from your IRA, you must pay taxes on the amount taken out and pay a 10% tax penalty. You may invest \$2000 a year in an IRA.

Do you want to invest \$2000 (Y or N)...

In the real world you may be allowed to make partial contributions to your IRA during the year rather than just the \$2,000 maximum all at once as in Squire.

When you advance to a new month, Squire will display the interest you earned in the pre-tax income summary screen.

WITHDRAWING FUNDS

If you decide to withdraw money from your IRA account before retirement, you select Sell from the command mode, then IRA from your investment portfolio.

FIGURE 38

IRA			
TYPE:	IRA		
DATE PURCHASED:	FEB 1986		
QUANTITY:	1		
PURCHASE PRICE:	\$2,000.00		
CURRENT PRICE:	\$2,234.00 ←		
LOANS/MARGIN:	—		
ANNUAL YIELD:	10.9%		
PRE-TAX INCOME:	\$ 20.29	Month	
AFTER-TAX INCOME:	—		
COMMISSION IF SOLD:	—		
PENALTY IF SOLD:	\$ 223.42	←	
GAIN IF SOLD:	\$2,234.25	Short	
TAXES IF SOLD:	\$ 670.27		
CASH IF SOLD:	\$2,234.00	←	

Enter amount of money desired?

Referring to Figure 38, we have: the purchase price (your contribution), the current price (principle plus accumulated interest), and your monthly income.

Note that the after-tax income heading has dashes. This is because the income from an IRA is tax-deferred until you retire. The pre-tax income value will grow each month as the amount of money in your IRA grows.

Below the income information in Figure 38, we have: the penalty you would pay if you withdrew all your money from the IRA (10% of the IRA's value). This penalty is paid when taxes are due in January.

When you make an IRA contribution, the entire \$2,000 is taken off your current taxable income. In Squire we accomplish effectively the same thing by showing your IRA contribution as a short-term loss at the time you make the contribution. This allows you to shelter \$2,000 of short-term gains in the same year.

When you withdraw IRA funds early, all of the money withdrawn is shown as short-term gain. That is why, referring back to Figure 38, the "gain if sold" is equal to the entire value of your IRA.

If you make a partial withdrawal from your IRA, all values in your portfolio will be prorated, including the amount of your original contribution.

An IRA is the best retirement investment you can make as not only is your annual contribution not taxed, but the tax on interest is deferred until retirement.

It is amazing to watch how rapidly your IRA account can grow with such a small annual investment.

MONEY MARKET ACCOUNTS

Investing your money in a money market fund is a good way to get high interest on your investment while retaining a great deal of liquidity. A money market fund is created by pooling the money of a group of investors to invest in T-Bills and short-term notes issued by private corporations. The money market fund can be managed by a bank, savings and loan, or other types of investment companies. Investors may write checks against their account, or may withdraw the entire amount. A money market fund can provide above-average returns because the pooled money can be used to make investments the individual could not afford.

A wise investor will keep enough funds in money market accounts to meet unexpected emergencies. Interest income received from a money market account is taxable as ordinary income (30% to 50%).

In Squire you must invest a minimum of \$2,500 to open your money market account. After the account is opened, you can add or withdraw funds at will.

HOW TO INVEST IN A MONEY MARKET FUND WHILE PLAYING SQUIRE

To open a money market account, select Buy from the command mode and Money Market from the investment menu.

Money market accounts have moderate yield, relatively low risk, and are very liquid. You can withdraw money at will with no commissions or penalties.

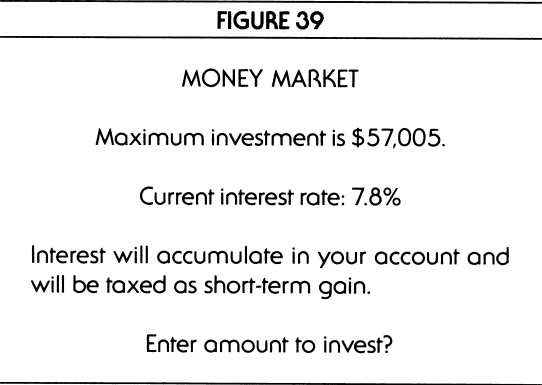


Figure 39 shows the Buy screen. Just enter the amount of money you would like to put in the account.

As interest accumulates in your account, you can achieve a snowballing effect of accumulated interest as with an IRA. Unfortunately the interest is considered ordinary income and Squire posts this income to short-term gains every month.

In order to withdraw funds from your money market account, select Sell from the command mode, then Money Market from your investment portfolio.

FIGURE 40

***** DETAIL PORTFOLIO REPORT *******MONEY MARKET ACCOUNT**

TYPE:	Money Market
DATE PURCHASED:	JUL 1987
QUANTITY:	1
PURCHASE PRICE:	\$10,010.00
CURRENT PRICE:	\$10,615.00 ←
LOANS/MARGIN:	—
ANNUAL YIELD:	9.1%
PRE-TAX INCOME:	\$ 80.33 Month
AFTER-TAX INCOME:	\$ 80.33 Month
COMMISSION IF SOLD:	—
PENALTY IF SOLD:	—
GAIN IF SOLD:	\$ 605.91 Short
TAXES IF SOLD:	—
CASH IF SOLD:	\$10,615.00 ←

Enter amount of money desired?

Figure 40 shows a detailed portfolio report for your money market account. The purchase price is the sum of your investments, and the current price is the sum of your investments plus accumulated interest.

The annual yield floats with current money market rates. Your pre-tax and after-tax incomes reflect monthly interest on your account. No "taxes if sold" are shown because the interest is posted to short-term gains every month.

A money market account is an ideal place to let idle funds sit as you accumulate interest, and there is no penalty for withdrawal.

CHAPTER 7

COLLECTIBLES

Some investors feel that by purchasing rare art, Oriental rugs, or jewelry, they can beat inflation and realize profits in excess of other investments. Unfortunately, the public's taste is fickle and today's treasure may become tomorrow's junk. Furthermore, there is no organized market for collectibles, making resales difficult. Oriental rugs of high quality and in good condition will provide the purchaser with pleasure and may be sold at a profit during a period of prosperity. Collectibles will bring low prices during a recession or a period of poor economic activity. Collectibles are not considered liquid. The profit derived from the sale of collectibles held for more than 6 months is considered a long-term gain.

In Squire you can invest in 6 different types of collectibles: stamps, rare coins, antique furniture, Oriental rugs, paintings, and porcelain. However, you can only own one collectible at a time.

HOW TO TRADE COLLECTIBLES IN SQUIRE

To invest in collectibles select Buy from the command mode, and then select Collectibles from the investment menu.

As you can see in Figure 41, you have the choice of 6 different collectibles. In general the value of all the collectibles follow trends in the general economy, some to a greater degree than others. Select the number adjacent to the type of collectible you would like to buy. You will notice an asterisk (*) adjacent to the number you selected. Now enter the amount you would like to invest. The minimum investment is \$5,000. Once you have made a collectible investment, you may not make another one until the first one is sold.

FIGURE 41

COLLECTIBLES

Minimum investment is \$ 5,000.
Maximum investment is \$57,005.

- 1 — Rare Coins
- 2 — Stamps
- 3 — Paintings
- 4 — Oriental Rugs
- 5 — Antique Furniture
- 6 — Porcelain

Enter reference number to buy...

FIGURE 42*****DETAIL PORTFOLIO REPORT*******PAINTINGS**

TYPE:	Collectibles
DATE PURCHASED:	JUL 1987
QUANTITY:	1
PURCHASE PRICE:	\$5,000.00
CURRENT PRICE:	\$4,811.44
LOANS/MARGIN:	—
ANNUAL YIELD:	—
PRE-TAX INCOME:	—
AFTER-TAX INCOME:	—
COMMISSION IF SOLD:	\$ 481.14
PENALTY IF SOLD:	—
LOSS IF SOLD:	\$-669.71 Short
TAXES IF SOLD:	\$ 200.91 CR
CASH IF SOLD:	\$4,330.29 ←

Do you want to sell (Y or N)...

SELLING COLLECTIBLES

When you want to sell your collectibles, you select Sell from the command mode, then Collectibles from your investment portfolio.

Referring to Figure 42, we have: when you purchased the collectible, the purchase price, and the current price (value). There is a hefty 10% commission on the sale of a collectible. If collectibles are held for 6 months, they can receive long-term tax treatment.

FIGURE 43*****SALE OF COLLECTIBLES*******PAINTINGS**

A buyer has been found for your collectibles.
Please review the sale report shown below.

****SALES REPORT****

PURCHASE PRICE:	\$5,000
SALE PRICE:	\$4,150
COMMISSION:	\$ 415
NET LOSS:	\$1,265

CASH RECEIVED: \$3,735

Press space bar to continue.

If you decide to sell, answer the "Do you want to sell" prompt with a Y for Yes. Squire will then inform you that it may take a few months to find a buyer.

As you move into new months, Squire tries to find a buyer for your collectibles. While you are waiting, the price is changing and there is no way to back out once you tell Squire to sell.

When you advance to a new month, Squire will inform you if a buyer has been found, as shown in Figure 43.

Collectibles are a high-risk, non-liquid investment. You should be very careful about investing in this market. Only invest if you think the economy is going to start booming.

CHAPTER 8

COMMODITY MARKET

AN INTRODUCTION TO FUTURES TRADING

This chapter provides you with a basic understanding of the commodity market and outlines how Squire differs from the real world. A commodity is defined as "any buyable product which can be used for commercial purposes." Over 40 different commodities are traded on the various commodity exchanges. These range from soybeans to foreign currencies.

A "commodity futures contract" is a standard agreement to buy or sell a commodity at a specified future date. The quantity, quality, and price of the commodity must be specified in the futures contract.

EXAMPLE: You enter into a contract to sell 50 troy ounces of 99.5% pure platinum for \$407.00 per ounce, to be delivered in 6 months. This is a platinum-futures contract.

A "commodity exchange" is a place where people who want to buy futures contracts meet with those who want to sell contracts. Actually, their representatives, called brokers, do the trading at the commodity exchange.

WHO BUYS OR SELLS COMMODITIES?

Two types of people buy or sell futures contracts: Speculators and Hedgers. A hedger is a person who uses a futures contract as an insurance policy.

EXAMPLE 1: A farmer is preparing to plant a winter wheat crop. The farmer knows what it will cost to plant and grow the wheat but, unfortunately, doesn't know what the wheat will sell for when the crop is harvested. Therefore, the farmer (or hedger) eliminates this uncertainty by selling a wheat-futures contract to be delivered when his wheat is harvested. Since the price is specified in the futures contract, the farmer knows exactly what his profit will be.

EXAMPLE 2: A jewelry manufacturer has received an order for gold necklaces to be delivered next year, but the prices must be quoted now. Unfortunately, the manufacturer has no idea what gold will be selling for next year. To eliminate this uncertainty, the jewelry manufacturer (or hedger) buys a gold-futures contract to be delivered next year when the necklace order is due to be shipped. This assures the manufacturer a profit, as the futures price is specified in the contract.

As you can see, both the farmer and the jewelry manufacturer have used futures contracts to insure themselves against unknown price changes. By trading commodity futures, they both avoid the risk of losing money because of a sudden change in commodity prices.

A "commodity speculator" is a person who is willing to assume the risks that the farmer and jewelry manufacturer don't want to take.

EXAMPLE 1: A speculator agrees to buy the wheat from the farmer in 6 months for \$3.00 a bushel. If, six months later, wheat is trading for \$3.50 a bushel, the speculator could then buy the wheat from the farmer for \$3.00 a bushel, turn around and sell it for \$3.50, making a profit of \$.50 a bushel. However, if the wheat price dropped to \$2.50 a bushel, the speculator would have lost \$.50 a bushel.

EXAMPLE 2: A speculator agrees to sell the jewelry manufacturer gold at \$350.00 per ounce next year. When next year rolls around, gold is trading for \$325.00 an ounce. The speculator sells it to the jewelry manufacturer for \$350.00 an ounce and makes a \$25.00 profit on each ounce.

LONG AND SHORT POSITIONS

A contract to buy commodities is called a long position and a contract to sell commodities is called a short position.

In the actual commodity market, the speculator almost never actually buys or sells the

physical commodity. Most of the trading is done on paper with profits and losses settled before the contract comes due.

CANCELLING A CONTRACT

If a speculator enters into a contract to buy soybeans, all that is required to cancel that contract is to enter into an identical contract to sell soybeans. This is called "offsetting your position." Since there are identical contracts to buy and sell the same commodity, the contracts are cancelled, or offset. In Squire, when you want to take a position in the commodities market, you will "buy" a long contract. When you want to offset a position, you can "sell" that contract.

EXAMPLE: You think the price of soybeans is going to go up, so you buy a long contract in soybeans. After the price rises, you sell your long soybean contract, collecting your profits. Remember, you buy short when you expect prices to drop, and long when you expect prices to rise.

From this point forward we are going to use the terms "buy" and "sell" as defined in the example above.

In the actual commodity market, you can buy futures contracts with delivery dates as short as 2 weeks, or as long as a year and a half. In Squire, the delivery dates are always 18 months from the purchase date.

In the actual commodity market, if you forget to offset your position and the contract month rolls by, you could actually wind up taking receipt of the commodity, or being responsible for delivering it. In Squire, your futures contract will be sold for 90 cents on the dollar if you forget to offset (sell) your position.

The size of a commodity futures contract depends on the type of commodity. For instance, one soybean contract is equal to 5,000 bushels of soybeans. The value of one contract depends on the size of the contract and the price of the commodity. A typical contract value ranges from \$15,000 to \$80,000.

A speculator can purchase a commodity futures contract on "margin." Margin is good faith money held by your broker and is not part of the contract purchase price. Commodity margin requirements range from 1% to 10% of the contract price, and are dictated by the commodity exchange and your broker.

EXAMPLE: A wheat contract valued at \$50,000 may be purchased on 10% margin for \$5,000. Your profits and losses are based on the change in value of the total contract value. If the price of wheat goes up 10%, your contract increases in value by \$5,000. Since all you put up was \$5,000, you would have made a 100% profit!

In Squire, margin is 10% of the contract value. In the actual commodity market, the margin deposit is specified as an actual dollar value and does not change unless the exchange orders it to be changed.

Brokers charge a commission on each complete futures contract transaction. This is called a "round trip commission" and is paid only when you offset (sell) your contract. You pay no commission when you buy a contract. In Squire, the commission is 0.5% of the contract value.

PRICE CHANGE FACTORS

The law of supply and demand is the governing factor in commodity price fluctuations. If the supply decreases, then the demand becomes greater, and prices rise. If the supply increases, then demand decreases, and prices go down. Supply and demand have a reciprocal relationship, meaning that an effect on supply has an opposite effect on demand, and vice versa.

Some demand factors are seasonal in nature, such as heating oil being in greater demand during the winter, and wheat being in greater supply following a harvest.

News reports regarding changes in supply and demand conditions are the greatest short-term influence on the commodities market.

EXAMPLE: If a freeze is forecast for Florida, then the price of orange juice rises because of speculation that the freeze will damage the oranges and decrease the supply.

HOW TO PREDICT PRICE CHANGES

There are two schools of thought in regard to predicting commodity price changes. The first, called the fundamental approach, relies on researching changes in supply and demand. In Squire, use the news reports for this research. The second is called the technical approach. It relies on the analysis of price trends in order to project changes in the future.

Most commodity traders use a combination of fundamental and technical approaches to decide when to enter into a futures contract.

MAXIMUM PRICE CHANGES

Because the commodity futures market reacts in a volatile manner to news reports, the commodity exchange limits the price movement that can occur in a single trading session. In Squire, the maximum price change per month is specified for each commodity. For instance, gold may not change more than \$15.00 an ounce, or \$1,500 per contract, in a trading session. So if you owned one gold contract, the most you could gain or lose in a trading session would be \$1,500. The terms "limit up" and "limit down" refer to the maximum upward or downward price movements. If you are holding a long position on a commodity (hoping that the price will rise), and the price goes limit down, you may not be able to offset (sell) your contract. The reason for this is that other speculators may suspect that the price will continue to go down in the next trading session, and will not want to "offset" your position. In other words, if you have a long June pork belly contract and the price goes limit down, you may not be

able to offset (sell) your pork belly contract. In Squire, there is a significant probability that if the price change gets near the down limit, and you are holding a long position, you will not be able to sell your contract until the next week's session. Conversely, if you try to buy a long position that is limit up, no one will sell you one.

YOUR NET WORTH

Probably the most significant difference between the commodity market and the stock market is that you can reinvest your profits in the former the day you make them without offsetting (selling) your contract. Your broker will maintain a cash account in your name, and at the end of each trading session your account will be credited with your profits and debited with your losses. When you sell your contract, all you will receive back is your good faith money. If the price moves against your position and you don't have enough cash to settle your account, you will be forced to sell some of your holdings.

Most conservative traders will leave plenty of money in their cash account to cover possible adverse price changes. If you're not careful, you could wind up in the strange position of owing more taxes on a commodity than you receive back in margin money when you sell your contract. Just remember that you can spend your profits the day you earn them, and conversely, must pay your losses the day you incur them.

In Squire, you are always forced to maintain the specified margin percentage. In the real market, your broker may allow some of your losses to be paid out of your good faith money (or margin account). But, if the margin account drops below a specified level (called maintenance level), then the broker makes a margin call, forcing the speculator to bring his account back to the original level.

The current price of a commodity is called the "spot price" and the price in future months is obviously called the "futures price." There is no firm rule as to whether or not the futures price will be greater or less than the spot price. This is usually dictated by supply and demand conditions. If traders anticipate a downward price trend, then the futures price will be less than the spot price.

In addition to long and short positions, there is an investment called a "spread." Spreading is the simultaneous purchase and sale of futures contracts in different months or in different markets, with the expectation that a change in the price differential between the two will result.

COMMODITY OPTIONS

Commodity options offer the investor the opportunity to limit the risks involved in the commodity futures market. A commodity option is the right to buy (call) or sell (put) a futures contract at a specified price within a certain period of time. The call option holder can make a profit if the futures price increases, but limits his loss to the cost of the option if the futures price goes down. The put option holder profits if the futures price declines, but limits his loss to the cost of the option if the futures price increases. Commodity options limit the price risk and offer the investor high leverage.

Squire allows you to trade both long soybean and gold contracts. Margin is fixed at 10%, and short sales are not allowed.

SOYBEANS

Soybean prices are primarily influenced by crop size estimates. An increase in crop size will depress prices, and vice versa.

GOLD

The threat of destabilizing events in the world tends to drive gold prices up. The threat of war is sure to drive the price up.

If you find the commodity market exciting, buy Blue Chip Software's commodity market simulation, Tycoon. Tycoon allows you to trade 15 diverse commodities, including stock market indexes, foreign currencies, coffee, and cattle. Short positions can be traded, and margins on some commodities are less than 3%. The tools available to research commodity prices are nothing short of amazing in Tycoon. They include commodity index graphs, historical bar charts, 3-week rolling average graphs, oscillator graphs, and point and figure graphs. For the investor who wants to use commodity options, the Macintosh version of Blue Chip's Tycoon commodity market simulation includes this feature. You'll learn how to use all these investment tools while having the time of your life.

HOW TO TRADE COMMODITIES IN SQUIRE

To purchase commodities, you must select Buy from the command mode, then Commodities from the investment menu.

Referring to Figure 44, Squire is prompting you to enter the reference number of the commodity to buy. You can trade long gold and soybean contracts on 10% margin. Reading from left to right we have: a reference number used to select the commodity to buy, the commodity name, the price and pricing units, the dollar margin requirement per contract, and the contract size. Gold is quoted in dollars per ounce, and soybeans in cents per bushel. The margin requirement is determined by taking 10 percent of the contract size times the unit price.

FIGURE 44

COMMODITY MARKET

Long Positions at 10% margin.

REF	NAM	PRICE	UNITS	MARGIN	CONT	SIZE
1	SOY	\$736.40	CTS/BU	\$3,682	5000	BU
2	GLD	\$318.00	\$/OZ	\$3,180	100	OZ

THESE CONTRACTS ARE DUE IN JUL 1988.

Maximum number you can buy: 17

Enter number of contracts to buy?

Below the pricing information is the due date for the contract. The due date is always 18 months from the purchase date. Select the commodity you want to buy by pressing 1 or 2, and Squire will display the maximum number of contracts you can buy. Below this you will be prompted to enter the number of contracts you want to buy. Next you will see a buy transaction report. Commission is charged on the sale of commodities contracts only.

LIMIT UP AND DOWN

The maximum price movement in a single trading session (a month in Squire) is \$15.00 per ounce for gold, and 75¢ per bushel for soybeans. Because the actual price of commodities in Squire floats with the spot price (no limits), there can be a big difference between the futures price and the spot price. Squire's graphs of soybeans and gold reflect the spot price. The current prices shown in your portfolio and the price change table are the futures price.

EXAMPLE: If the spot price of gold changes \$30.00 per ounce in a short period, the commodities future price can only change \$15.00 an ounce in each trading session. It will take a few trading sessions for the futures price to come in line with the spot price. The consequence of this is that if you hold a long position and the prices go limit down, you will have a hard time finding a buyer for your contracts. Conversely, if you want to buy long positions in a limit up market, you may have trouble finding a seller.

In Squire, you may not be able to buy or sell contracts if the differences between the spot and futures prices of commodities increase.

When you advance each month, the commodity prices are very sensitive to news reports. Each month your gains and losses in the commodity market are taken directly to your cash. Your 10% margin requirement is also updated every month. If the price jumps 10%, you will receive in cash the increased value of the commodities less the higher margin requirement. As a result of this, some strange things can happen, such as having a tax obligation larger than your margin. One advantage is that even though you get your profits (and losses) posted to cash every trading session, you don't have to worry about taxes until your contracts are sold. In Squire, all commodities held more than 6 months receive long term gains treatment.

FIGURE 45

*****COMMODITY CONTRACT WARNING*****

GOLD

Your commodity contracts are due in 3 months.
Don't forget to offset them!

Quantity: 2 Contracts

FIGURE 46

*****COMMODITY CONTRACTS DUE*****

GOLD

You forgot to offset your commodity contracts
and the contracts are due now! To avoid em-
barrassment you sold them for 90 cents on
the dollar.

SALES REPORT

QUANTITY:	2 Contracts
PURCHASE PRICE:	\$ 416 \$/oz.
SALE PRICE:	\$ 367 \$/oz.
COMMISSION:	\$ 367

NET LOSS: \$10,207

CASH RECEIVED: \$ 0

Press space bar to continue.

DUE DATE

As the due date of your contract gets close,
you will receive the warning shown in Figure
45. If you are foolish enough to let your contract
come due, your commodities will be sold for
90 cents on the dollar, as shown in Figure 46.

FIGURE 47

*****DETAIL PORTFOLIO REPORT*****

GOLD

JUN 1989

TYPE:	Commodity Market
DATE PURCHASED:	DEC 1987
QUANTITY:	2 Cont.
PURCHASE PRICE:	\$ 416.40 /oz.
CURRENT PRICE:	\$ 435.60 /oz.
LOANS/MARGIN:	—

ANNUAL YIELD:	—
PRE-TAX INCOME:	—
AFTER-TAX INCOME:	—

COMMISSION IF SOLD:	\$ 435.60
PENALTY IF SOLD:	—
GAIN IF SOLD:	\$3,404.40 Short
TAXES IF SOLD:	\$1,021.32
CASH IF SOLD:	\$8,276.40 ←

Enter number of contracts to sell?

Commission on the sale of a commodity
contract is .5% of the contract value.

SELLING YOUR HOLDINGS

When you decide to sell your contracts,
select Sell from the command mode, then your
specific commodity from the investment
portfolio.

As shown in Figure 47, we have: the num-
ber of contracts owned, the unit purchase price,
current price, and, as usual, the figures showing
what will happen if you sell. Enter the number
of contracts you would like to sell and, if the
game is not in a limit down condition on your
commodity, the sale will be executed.

Commodities are a high risk, high leverage
investment that are not for the timid investor.

CHAPTER 9

REAL ESTATE

AN INTRODUCTION TO REAL ESTATE INVESTMENT

This chapter provides you with a basic understanding of real estate. The real estate market represents a large number of business opportunities involving real property. Real property is defined as land, along with the trees and buildings on the land.

THREE TYPES OF PROPERTY

The most common real estate investment is the purchase of real property. The investor hopes that the value of the property will appreciate (go up), and that an income will be generated from the use of the property. There are three basic types of property a person can invest in, as described below.

Residential property is a building that provides shelter, comfort, and protection to a family. It can range from small apartments to huge mansions. An investor normally purchases residential property and rents it out to others on a monthly basis. The property owner is called the landlord. The people renting the property are called tenants. The investor hopes that the value of the property will increase over time, and that the rental income will be greater than the sum of the operating expenses and mortgage payments. Operating expenses are the monies spent to maintain the property in a liveable condition for the tenants. If an investor borrowed money to purchase the property, monthly payments called mortgage payments must be made to repay the loan.

Commercial property is used by business owners to conduct their day-to-day activities. It can range from a small unit in a shopping center to a giant factory building. The investor purchases the commercial property and rents

it out to a business on a monthly basis. In addition to the monthly rent, the investor normally receives a small percentage of the business' total sales volume. The investor hopes that the property's value will increase over time, and that the income from the property will be greater than the sum of the mortgage payments and operating expenses.

Land is the natural wealth of the earth that all goods are produced from, homes built upon, and wars fought over. An investor will purchase land upon which residential or commercial buildings may be built. In some cases, the land itself will be used to generate income through farming or forest harvesting. The investor hopes that demand for land will increase and the value of the property will rise.

MORTGAGE

Real estate purchases are rarely made with a large percentage of cash. An investor can make arrangements with a lending institution (bank or savings and loan), or, in some cases, an individual to borrow the money needed to purchase the property. The amount of cash an investor uses to purchase the property is called the down payment, and the amount of money borrowed is called the mortgage amount. A mortgage gives the lender the right to take over (foreclose) the property if the loan is not repaid. The mortgage is the security for the loan.

A property may have more than one mortgage loan at a time. A second mortgage loan usually carries a higher interest rate than a first mortgage. The interest paid on the loan is referred to as the mortgage rate. The higher the interest rate on a mortgage, the larger the monthly payment. High mortgage interest rates can make it impossible for most people to afford the large monthly mortgage payments.

EXAMPLE: An investor purchases a house for \$100,000. He uses \$20,000 of his own money, called the down payment. He borrows \$70,000 from the bank at 12% interest, called a first mortgage; and an additional \$10,000 from a friend at 16% interest, called a second mortgage.

Down Payment:	\$ 20,000
First Mortgage:	\$ 70,000
Second Mortgage:	\$ 10,000
Total	\$100,000

When borrowing money for a first or second mortgage, you may be required to pay a loan fee to the lending institution. This is an "advance interest payment." This fee can range from 1% to 5% of the loan amount.

A first mortgage is normally paid off over 30 or 40 years. A second mortgage is normally paid off over a 5 to 10-year period.

In some cases, the investor pays only the interest due, and at the end of the loan period, pays off the principle portion of the loan. This is sometimes referred to as a "balloon payment." In Squire, a first mortgage is paid off over 30 years.

CLOSING THE DEAL

When a real estate sale occurs, both the buyer and seller must pay what is called "closing costs." For the buyer, that amounts to around 3% of the purchase price, and includes loan fees, title insurance, escrow fees, and taxes. For the seller, closing costs are around 7% of the sale price, and include escrow fees, taxes, and the real estate broker's commission. When an investor wants to sell property, an agreement is signed with a real estate broker promising to pay the broker 6% of the property price, if the broker can find a qualified buyer. The 6% fee, or commission, is paid when the property sale is executed. A real estate broker and his agents are experts trained to understand the laws of real property.

TAXES AND TAX CREDITS

When selling property, the investor must be concerned about the effects of taxes. If an investment is held for less than 6 months, an investor must pay taxes on the profits at the same rate as for normal income (30-50%). The profits are called short-term gains. If the property is held for 6 months or longer, the taxes on profits are dramatically reduced (14-20%). This is called a "long-term gain." When you lose money on an investment, you can normally reduce your other tax obligations by the amount of the loss. In general, a long-term loss will result in a smaller tax savings than a short-term loss. The net effect of the tax laws is that if you are going to make money on a property, you should hold it for at least 6 months in order to reduce taxes. If you are going to lose money on a property sale, you should sell it before the 6th month, in order to maximize tax deductions from the loss. In Squire, all short-term gains are taxed at 30% and all long-term gains are taxed at 15%. We recognize that this is a gross oversimplification of the tax laws regarding real property, but it should convey a conceptual understanding of taxes.

DEPRECIATION

When you purchase an asset for a business, the assumption is that it will wear out someday and you will have to purchase a replacement. Although real property rarely wears out, the tax laws treat it the same as other assets. Every year, you are allowed to set aside some money to replace your assets (called depreciation). Taxes are not paid on the money that is set aside. The advantage of depreciation is that while you own the property, the depreciation reduces your current tax burden. The disadvantage is that when you sell the property, you will show a much larger profit because, in the eyes of the law, the actual value of the property has

been depreciating (going down) every year. Let's say you bought a property for \$100,000. The first year you had the property, you depreciated it \$10,000 for that year, and the value of the property is now only \$90,000 in the eyes of the law. If you sell the property in the second year for \$100,000, you must claim a profit of \$10,000, even though you merely broke even.

When you own income-producing property, you must pay taxes on any profits made during the year and, conversely, you can claim a tax deduction on any losses. Your income from the property comes primarily from rent payments from your tenants. Your operating expenses come from the maintenance of the property during the year. Fortunately, Uncle Sam lets us deduct the mortgage interest payments from the property income. If your operating expenses and interest payments are greater than the property income, you can claim a tax deduction at the end of the year.

KNOW YOUR CASH FLOW

This brings us to an important subject, called "cash flow." An investor really has two objectives when purchasing income property such as an apartment building. First is that the value of the property will rise so that a profit can be made when it is sold. Second, is that an income will be realized from the property. This income is called positive cash flow. If a player is spending more in operating expenses and mortgage payments than the income from rent, this would be termed negative cash flow. Too large a negative cash flow could force you to sell property at an inopportune time in order to raise cash. On the other hand, if you have a great deal of income from other sources, you may want to use real estate depreciation to "shelter" that income from taxes.

LEVERAGE YOUR INVESTMENTS

Leverage is the use of a small amount of cash to own a very expensive asset. For instance, if you could buy a \$100,000 house by putting \$5,000 down and borrowing the rest, you would be leveraging 20 to 1. That means that a 1% increase in the value of the property is equal to 20% of your actual investment (\$5,000). In real estate you want to use as much leveraging as possible. Therefore, you may want to borrow money against property after you have owned the property for a short period. Most banks will lend you up to 90% of the value of the property. If you own a property worth \$100,000 and you owe \$70,000, a bank might make a 90% loan on the property. This would net you \$20,000 cash ($\$100,000 \times 90\% - \$70,000$) to invest elsewhere. Of course, you must make payments on the new \$20,000 loan.

SUPPLY AND DEMAND

The laws of supply and demand are the principal factors affecting property prices. Demand for residential property is heavily influenced by the size and income level of the population. A rising level of income, even if there were no increase in population, could support considerable real estate activity. Commercial property is very sensitive to economic conditions. A recession can sharply reduce the number of commercial property transactions. Expanding communities and a generally good economic climate are sure to increase demand for land. High interest rates, along with a depressed economy, are sure to depress real estate sales. A depressed real estate market will result in large numbers of unsold houses being on the market. This increase in supply will force property prices to drop.

YOU HAVE OPTIONS

Many times an investor will see a property on the market that he would like to purchase but cannot raise the needed funds immediately. The investor can negotiate with the property owner to purchase an option on the property. An option is an agreement in which the property owner promises to sell the property to the investor for a fixed price. The investor has a limited amount of time to buy the property. In the event that the investor decides not to buy the property, the option expires at the end of the time period. An expired option is worthless. Let's say you want to buy a \$100,000 office building. You pay the owner \$3,500 in return for a 6-month option. Any time during the next 6 months you can purchase the property, if you want to, for \$100,000. You are not obligated to purchase the property.

Sometimes an option is an inexpensive way to speculate in real estate. If you think property prices are going to rise dramatically, you may be better off buying options for 3% to 5% of the purchase price, rather than buying the property itself. The combined buy and sell closing costs on a property purchase are around 10%. So, if you purchase the property, you automatically lose 10%, plus any losses you may incur if the value of the property drops. With an option, the most you can lose is the 3% to 5% option cost. If the price shoots up, you can always exercise your option. As the price of the option is considered part of the buy closing costs, it will reduce your taxes on the profits from the property when you sell.

In the real estate market, there are also investments that do not involve directly purchasing real property.

SECOND MORTGAGES CAN BE PROFITABLE

You can lend money to other investors and take a mortgage from them as security for the loan. The advantage of this type of investment is that you receive a monthly income

from the payments, and you can easily sell the second mortgage if you need to raise cash. Let's say that you have \$100,000 of idle cash. You could lend it to someone as a second mortgage and receive a very large return on your investment. The reason a second mortgage pays a higher interest rate than a first mortgage is that the risk is higher. If the property owner stops making mortgage payments, the property will be sold to pay off the loans. The first mortgage holder will be paid off first, and there may not be enough money left over to pay the second mortgage holder.

The fluctuation of mortgage interest rates in the economy does create a risk for investors in second mortgages.

Let's say you have invested \$100,000 in a second mortgage paying 15% interest, and the interest rates zoom up to 20% for second mortgages. Who would want to buy your second mortgage paying 15% interest, when they could invest in a new second mortgage paying 20%? The only way you could sell your 15% mortgage is by reducing the price you were willing to sell it for. This is called "discounting." Of course, the opposite could occur and you could sell your second mortgage for a premium (more than face value)!

It does not make sense to invest money in the second mortgage market, if it would prevent you from paying off a second mortgage on one of your properties that is costing you more in interest than you could receive by making a new investment.

CREATIVE INVESTMENTS

There are also a large number of purely speculative investments that include limited partnerships, real estate investment trusts, and real estate projects (please refer to the glossary if you are not familiar with these terms). These types of investments have the potential for spectacular returns, and losses. Many speculative investments have tax advantages that outweigh the risks involved.

Squire allows you to purchase a total of 14 properties (commercial and residential) in two states over the course of the game. Properties are financed through first mortgages and the only way to pull equity out of property is to sell it.

If you would like to learn more about the real estate market, buy Blue Chip Software's real estate simulation, Baron. Baron offers you 90 properties over the course of the game. The properties are located in 5 geographic areas. In addition to residential and commercial property, raw land is available. Second mortgages may be taken out on properties, you may invest idle cash in the second mortgage market, and you can make various types of speculative real estate investments. Extensive geographical property price trend graphs are available for research.

HOW TO BUY AND SELL REAL ESTATE IN SQUIRE

To buy real estate you must select Buy in the command mode, then Real Estate from the investment menu. In Squire you can purchase 4 different types of real estate:

Type	Abbreviation
California Residential Property	CA-RS
California Commercial Property	CA-CM
New York Residential Property	NY-RS
New York Commercial Property	NY-CM

Note that property may not be available in every one of the four areas.

Each of the real estate types is affected by various influence factors. They are all affected by the general economy and current interest rates. News about the individual state or investment type (residential or commercial) will have an effect on price. To judge the correct movement of real estate prices, you must be sensitive to a whole series of factors!

FIGURE 48			
*** REAL ESTATE LISTINGS ***			
REF	PROPERTY DESCRIPTION		
1	COMMERCIAL BLDG. — 2 UNITS	PRICE: \$106,881	DOWN: 50% CA-CM
2	3 OFFICES PLUS BILLBOARD	PRICE: \$348,768	DOWN: 25% NY-CM
3	APARTMENT — 4 ONE BDRM. UNITS	PRICE: \$125,280	DOWN: 20% CA-RS
4	INDUSTRIAL BUILDING — 7100 SQ. FT.	PRICE: \$405,072	DOWN: 30% CA-RS
5	APARTMENT COMPLEX — 17 UNITS	PRICE: \$228,480	DOWN: 25% NY-RS
6	COMBO OFFICE/WAREHOUSE — 2 UNITS	PRICE: \$454,125	DOWN: 30% NY-CM
Enter ref number for description...			

Figure 48 shows a listing of 6 properties that you can purchase. When you buy a property, a new property will be placed in the listing. A total of 14 properties can be bought and sold during the course of the game. The information for each of the 6 properties in Figure 48 includes: a short description, the price, the percentage of the purchase price required as a down payment, and the type of real estate.

You can look at graphs of each of Squire's real estate types to project future trends.

Press the reference number to the left of each property description in Figure 48 to see a real estate description of that property as shown in Figure 49.

FIGURE 49

***** REAL ESTATE DESCRIPTIONS *****

APARTMENT — 4 ONE BDRM. UNITS
BENSON PL. HOLLYWOOD, CA.

BUILDING IN EXCELLENT CONDITION. WITH A
LITTLE SWEAT IT COULD BE VERY CUTE. GOOD
FOR STARTER OR INCOME. SELLER VERY MOTI-
VATED — SERVING A JAIL SENTENCE!

SALE PRICE:	\$125,280
DOWN PAYMENT:	\$ 25,056
FIRST MORTGAGE:	\$100,224 @ 7.0%
CLOSING COSTS:	\$ 6,264
CASH REQUIRED:	\$ 31,320 ←

***** MONTHLY INCOME AND EXPENSES *****

RENTAL INCOME:	\$ 940
MORTGAGE PAYMENT:	\$ 670
PRE-TAX INCOME:	\$ 270
AFTER-TAX INCOME:	\$ -901

Do you want to buy (Y or N)...

The real estate description contains a broader description of the property along with some very specific financial data about the property. Starting with sale price and moving down we have: the down payment required, the first mortgage amount and interest rate, closing costs, and the total cash required to complete the purchase. Squire assumes the first mortgage has a 30-year term and is at a fixed rate. The closing costs include a 5% Buy Commission. In real life, the buyer's closing costs would be closer to 3%.

Below "Cash Required" in Figure 49 we have: the monthly income and expenses. Rental income is the difference between the rent you collect from your tenants and the operating expense for the property. Below this

is your mortgage payment, which obviously is dramatically affected by the interest rate on the first mortgage. Pre-tax income is the difference between your rental income and your mortgage payment. You hope this is positive! If you have a negative pre-tax income, it will be taken from your cash each month.

After-tax income is a little bit more complicated. Your taxable income is your rental income. Your taxable losses are the interest on your first mortgage, and the 1% per month depreciation on your property. Your after-tax income is the difference between your rental income and these taxable losses.

This results in an interesting situation in which you are receiving a real income from the property but, from a tax standpoint, you are showing a loss, allowing you to shelter other income from taxes. Of course, it would be pointless (or worse) to buy a property with a big after tax loss if you had no income from other investments to shelter. This after-tax income is considered a short-term loss.

If you want to buy the property, answer the "Do you want to buy" with a Y for Yes. A buy transaction report will now be displayed.

As each new month passes, the prices in each state and for each type of property fluctuate. A key point to remember is that when you sell the property, the taxable gain (or loss) will be the difference between the depreciated value and the sale price.

SELLING REAL ESTATE

If you want to sell one of your properties, select Sell from the command mode, then the specific property from your investment portfolio.

Figure 50 is a detailed portfolio report of your property, reading from top to bottom we have: a description of the property, the date purchased, the purchase price, the current market price, your yield, and pre-tax and after-tax income. In this case yield refers to your rental income divided by the purchase price of the property. Yield does not include the effects of your mortgage payment.

Below this is the commission if sold, which is 5% of the sale price. In real life, this would be closer to 7%.

You will notice the loss (gain) if sold value changing as the depreciated value of the property goes down each month. If the market value of your property stays the same over time, you will still have a substantial taxable gain if you sell your property due to the effect of depreciation.

You will also notice that the balance of your first mortgage loan will gradually be reduced as you pay the mortgage off.

Answer Y or N to the "Do you want to sell" prompt in Figure 50. If you hold your property for at least 6 months, you will receive long-term tax treatment.

Real estate can be a great tax shelter because of the effects of depreciation. Because of the high transaction costs (10% between buying and selling), you really have to work at finding a property that will appreciate adequately to cover these costs.

FIGURE 50			
DETAIL PORTFOLIO REPORT			
CALIFORNIA RESIDENTIAL APARTMENT— 4 ONE BDRM. UNITS			
TYPE:	Real Estate		
DATE PURCHASED:	JUL 1987		
QUANTITY:	1		
PURCHASE PRICE:	\$ 114,210.00		
CURRENT PRICE:	\$ 112,860.00		
LOANS/MARGIN:	\$ 91,068.00 8.2%		
ANNUAL YIELD:	9.0%		
PRE-TAX INCOME:	\$	175.58	Month
AFTER-TAX INCOME:	\$	−905.52	Month
COMMISSION IF SOLD:	\$	5,135.00	
PENALTY IF SOLD:	—		
LOSS IF SOLD:	\$	−8,135.10	Short
TAXES IF SOLD:	\$	2,440.53	CR
CASH IF SOLD:	\$	16,149.00	←
Do you want to sell (Y or N)...			

OIL AND GAS LIMITED PARTNERSHIP

When you invest in a limited partnership, you give control of your money to someone called a "general partner." The general partner invests your money and you have no control over how that money is used. The advantage of the limited partnership is that your risk is limited to the size of your investment, whereas the general partner's risk is unlimited.

An oil and gas limited partnership is a highly speculative investment that has some large tax advantages. There are two types of oil and gas drilling operations. A developmental well is drilled in previously discovered oil fields to exploit already producing formations. An exploratory well is a well drilled close to, but not in, known production areas.

Generally, the developmental deals have lower risks, provide income earlier, and are not as rewarding as exploratory projects.

Investors can deduct from their income all intangible drilling and, if the well comes in, depletion allowances as well. The net effect of these tax benefits is that the income from an oil and gas limited partnership can be virtually tax free.

The rate of return on these types of investments, because of their speculative nature, is much higher than money market rates.

Once you invest in a limited partnership, it is very difficult to pull your money out. You could take a substantial loss if you had to sell your holdings.

In Squire you may invest in as many oil and gas deals as you like. You will pay a 65% penalty if you withdraw your funds. The rate of return in Squire's oil and gas investments stays at a fixed yield. The minimum investment is \$2,000.

HOW TO INVEST IN OIL & GAS WHILE PLAYING SQUIRE

To make an oil and gas investment, select Buy from the command mode, then select Oil and Gas from the investment menu.

FIGURE 51

OIL & GAS
LIMITED PARTNERSHIP

Minimum investment is \$ 2,000.
Maximum investment is \$57,005.

The partnership is projecting a 12.5% return on your investment. As this business generates many tax deductions, the income is for all practical purposes tax-exempt. Once you have invested your money, it is very difficult to liquidate your holdings. Expect to take a big loss if you have to sell. You will receive quarterly payments.

Enter amount to invest?

As shown in Figure 51, all you have to do is enter in the size of the investment you would like to make. When you have done this, you will receive a buy transaction report. Note that there is no commission on this investment.

You will receive quarterly interest payments from the partnership in March, June, September, and December.

If you need to sell off your oil and gas investment, select Sell from the command mode, then Oil and Gas from your investment portfolio.

As shown in Figure 52, the penalty for selling off your limited partnership interest is very steep! Note that if you have held your oil and gas holdings for at least 6 months, the loss on a sale will be treated as a long-term loss.

In Figure 52 there is pre-tax, but no after-tax income. This is because you will owe no taxes on this income. To calculate your quarterly payment, multiply your monthly pre-tax income by 3. If you want to sell, answer Y for Yes to the "Do you want to sell" prompt.

Oil and gas limited partnership investments have high yield and moderate risk. They are extremely non-liquid. Most important, they are virtually tax-exempt.

FIGURE 52			
DETAIL PORTFOLIO REPORT			
OIL & GAS			
TYPE:	Oil & Gas		
DATE PURCHASED:	JUL 1987		
QUANTITY:	1		
PURCHASE PRICE:	\$ 4,000.00		
CURRENT PRICE:	\$ 4,000.00		
LOANS/MARGIN:	—		
ANNUAL YIELD:	14.5%		
PRE-TAX INCOME:	\$	48.38	Month
AFTER-TAX INCOME:	—		
COMMISSION IF SOLD:	—		
PENALTY IF SOLD:	\$	2,600.00	←
LOSS IF SOLD:	\$	-2,600.00	Short
TAXES IF SOLD:	\$	780.00	CR
CASH IF SOLD:	\$	1,400.00	←
Do you want to sell (Y or N)			

CHAPTER 11

CATTLE FEEDING

Cattle feeding is a tax-deferred income investment. This type of investment moves income tax liability from the current taxable year to the next taxable year.

The investor purchases a herd of cattle just before the end of the year, and takes the purchase price of the cattle as a business expense in the current year's taxes. The cattle are then fattened up for slaughter and sold after the 1st of the year. Along with deferring income for a year, the investor might make a small profit on the sale of the cattle.

In Squire, you may defer income by putting a minimum of \$10,000 into cattle feeding.

HOW TO INVEST IN CATTLE WHILE PLAYING SQUIRE

To purchase cattle you select Buy from the command mode, then Cattle from the investment menu.

FIGURE 53

CATTLE FEEDING

Minimum investment is \$10,000.
Maximum investment is \$58,982.

This investment can move income from the current year into the next year. You will have to pay a 1% management fee and if you sell your cattle before 6 months is up, you will lose 10% of your investment. At the end of 6 months your cattle will be sold and the money will be added to your cash. To offset your current tax obligation you must invest: \$2100.

Enter amount to invest?

As shown in Figure 53, you can purchase cattle and pay a 1% management fee for their care. Enter the amount you would like to invest and the buy transaction report will be displayed.

Cattle are sold off automatically six months after you purchase them. As there would be no tax advantage, Squire will not let you purchase cattle until after June of each year.

SELLING EARLY

If you decide to sell your cattle off early, you will have to pay a 10% penalty and may lose the tax benefits of deferring income.

FIGURE 54

DETAIL PORTFOLIO REPORT

CATTLE FEEDING

TYPE:	Cattle Feeding
DATE PURCHASED:	NOV 1987
QUANTITY:	1
PURCHASE PRICE:	\$10,000.00
CURRENT PRICE:	\$10,000.00
LOANS/MARGIN:	—
ANNUAL YIELD:	—
PRE-TAX INCOME:	—
AFTER-TAX INCOME:	—
COMMISSION IF SOLD:	—
PENALTY IF SOLD:	\$ 1,000.00 ←
GAIN IF SOLD:	\$ 8,900.00 Short
TAXES IF SOLD:	\$ 2,670.00
CASH IF SOLD:	\$ 9,000.00 ←

Do you want to sell (Y or N)

Figure 54 shows a detailed portfolio for your cattle. The only thing of interest in the report is the 10% penalty if sold. Also note that when your cattle are sold, all the income is considered short-term gain. If you are willing to accept that 10% early sale penalty, answer Y for Yes to the "Do you want to sell" prompt.

As you advance through the 6 months after your cattle purchase, you will see Figure 55 displayed to indicate when your cattle have been sold.

Cattle feeding is a simple method of deferring income from one year to the next.

FIGURE 55

***** SALE OF CATTLE *****

Your cattle have been sold and the proceeds are considered to be short-term gains.

CASH RECEIVED: \$10,000

REALITY MODE

Squire's reality mode allows you to test your own retirement plan using Squire's economic simulation. First Squire will help you determine how large a nest egg you will need in the bank to maintain your desired standard of living at retirement. Next you will tell Squire about your current financial condition. For example, if you have stocks in real life, Squire will give you an equivalent value of stocks when you start the simulation. Last but not least, Squire will let you enter interim goals, such as sending your kids to college.

FIGURE 56

SQUIRE
FINANCIAL PLANNING SIMULATION™

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VERSION 1.0
WRITTEN BY JIM ZUBER

- (C)LEAR — Clear player directory.
- (P)LAY — Play the standard game.
- (Q)UIT — Quit playing Squire.
- (R)EALITY — Play the reality game.
- (S)AVED — Play a saved game.

Enter action desired...

To enter the reality mode, restart your Squire disk (see Appendix D, "Loading Instructions"). As shown in Figure 56, enter R for reality mode. A brief description of the reality mode will be displayed as shown in Figure 57. Answer Y for Yes if you want to continue.

***** REALITY MODE *****

You have selected Squire's reality mode. Playing in the reality mode allows you to select your own retirement goals along the way—such as sending your kids to college. You may also specify your own starting assets and income. Squire will now help you project the monthly income you will require at retirement.

Do you want to continue (Y or N)...

SETTING GOALS

At this point Squire will ask you a series of questions to help you determine your retirement goal. Don't worry if you make a mistake as you will get a chance to correct most errors. You can just press the RETURN key if you want to skip a question.

The first four questions involve the current year, your current age, the age at which you plan to retire, and whether or not you own your housing. Since Squire is a 20-year simulation, the difference between your current age and the age you plan to retire cannot be greater than 20 years. Take particular care in entering these items as you will not be able to make corrections.

The next series of questions involves entering your current living expenses. It is assumed that you want to maintain your current standard of living during retirement. If this is not the case, adjust your input up or down accordingly.

Figure 58 will be displayed after you answer all the questions. This is a summary of your current annual expenses and an estimate of what these expenses will cost at retirement (assuming an 8% inflation rate). Reading from

FIGURE 58

*****INCOME REQUIREMENTS SUMMARY*****

	1984 ANNUAL COST	2004 ANNUAL COST
1 Housing	\$11,448	\$ 11,448
2 Property Tax	\$ 1,000	\$ 1,000
3 Utilities	\$ 2,400	\$ 11,160
4 Food	\$ 5,720	\$ 26,639
5 Insurance	\$ 1,836	\$ 8,534
6 Medical	\$ 2,400	\$ 11,160
7 Automobile	\$ 7,200	\$ 33,536
8 Recreation	\$ 3,000	\$ 13,964
9 Misc.	\$ 4,800	\$ 22,353
TOTAL	\$39,804	\$139,794

To retire in 2004 with an annual income of \$139,794, you must have a net worth of \$1,747,425 at retirement.

Are all values correct? (Y or N)...

left to right we have: a reference number used in editing, a description, your current annual expenses, and a projection of the annual expenses at retirement. From this information Squire can determine the annual income you will require at retirement to maintain your current standard of living. Squire will set as your retirement goal a sum of money necessary to achieve that annual income. This assumes you will receive 8% interest on money in a bank account and you will live off the interest.

At the bottom of the screen Squire will ask, "Are all values correct? (Y or N)." If you answer N for No, Squire will allow you to make corrections to the various items you entered. Squire will ask you to "Enter reference number to correct." Enter the number to the left of an item on the screen to be corrected. You will now be prompted to enter a corrected value.

ENTERING YOUR ASSETS

Assuming Squire has determined your retirement goal, you will now be prompted to enter in your current assets. You will first be asked to enter your cash in bank accounts and your disposable monthly income. Next you will be asked the dollar value of each of your current assets. Try to fit your current assets into one of Squire's 11 investment categories. If all else fails, there is a catch-all, "miscellaneous investments," as the last prompt. Figure 59 shows a summary of the assets you entered. Once again, if you answer N to the "Are all values correct?" prompt, you will be able to edit specific items. If your current assets are greater than 10% of your retirement goal, your starting status will be above Novice. If your current assets are greater than your retirement goal, you will have to start over with a new goal.

FIGURE 59

*****CURRENT ASSET SUMMARY*****

1	Cash and misc. assets	\$ 5,000
2	AA Corporate Bonds	\$ 5,000
3	B Corporate Bonds	\$ 3,500
4	Blue Chip Stock	\$10,000
5	Growth Stocks	\$ 5,000
6	Oil & Gas	\$ 7,500
7	IRA	\$12,500
8	Money Market	\$ 3,000
9	Collectibles	\$ 5,000
A	Real Estate	\$30,000
B	Cattle Feeding	\$ 0
C	Commodity Market	\$ 6,000
	TOTAL	\$92,500

You will start this session of Squire with a net worth of \$92,500. Your starting status is NOVICE and your monthly income is \$400(D).

Are all values correct? (Y or N)...

ASSET CONVERSION

During the creation of a new game, Squire will convert the dollar value of your current assets to various game assets. If your current assets in a particular category are less than the minimum investment requirement (e.g. \$2,500 for money market), then the value of that asset will be credited to your cash. The first thing you should do after the start of a new game is to check the actual assets Squire has given you. For instance, if you enter \$5,000 in real estate assets, Squire may not be able to find a property for you with an entry cost of only \$5,000.

INTERIM GOALS

After you have entered your current assets, Squire will display Figure 60. This is a brief description of interim goals. If you have any interim goals, answer Y to the question, "Do you have any interim goals?" You will now be allowed to enter up to 7 interim goals. For each goal, enter a description of the goal (send Mary to school), the amount of money it would cost today, and the year the goal must be achieved by. After entering each item Squire will ask, "Is this entry correct (Y or N). If you answer N, you can re-enter the informa-

tion. If you answer Y, you can enter an additional item. When you have completed entering all your interim goals, just press the ENTER key when asked for a description. Figure 61 shows a summary of your interim goals. Note that the future cost of each interim goal is shown in the summary. Press the SPACE BAR to continue.

FIGURE 61

INTERIM GOAL SUMMARY

1980 — GO ON A VACATION TO PARIS
Current: \$ 5,000 Future: \$ 6,801

1992 — SEND BABY HUEY TO COLLEGE
Current: \$10,000 Future: \$18,506

A new game will now be created using your reality mode entries. Squire is played in exactly the same manner as in the default mode, except the starting assets and retirement goal are your own.

Interim goals always fall due in December of the year you specified. You will be warned of a pending interim goal a few months before it is due. You must have enough cash available by November in order to meet the interim goal when it falls due in December. If you successfully achieve an interim goal, you will see Figure 62 displayed.

FIGURE 62

INTERIM GOAL

GO ON A VACATION TO PARIS

Congratulations!!!!

You have achieved a major interim retirement goal. Your cash has been reduced by \$6,801.

FIGURE 60

INTERIM GOALS

Most people have major financial goals they would like to achieve in addition to retirement. Buying a house or sending a child to college must be planned well in advance. In Squire you may specify up to seven interim goals. Enter a short description of each goal, the amount of money in today's dollars it will take to achieve this goal, and also the date you would like to fulfill the goal.

Do you have any interim goals (Y or N)...

FIGURE 63

*****INTERIM GOAL SUMMARY*****

GOOD — GO ON A VACATION TO PARIS

Cost to achieve goal: \$6,801

1992 — SEND BABY HUEY TO COLLEGE

Cost to achieve goal: \$18,506

When you achieve an interim goal, Squire will display “good” in place of the due date of the goal, as shown in Figure 63. If you miss a goal, Squire will display “fail” in place of the due date.

The unexpected events such as, “Your brother broke his leg and you pay the bill,” do not appear in the reality mode. Although preparing for unexpected events is an important lesson to learn, we felt it detracted from the realism of this mode. Certainly the player can learn this lesson while playing in the default mode.

SUMMARY

Squire can be a valuable tool in testing out various retirement strategies. While success at Squire is no guarantee of success in the real world, we do think Squire can help point you in the right direction. Certainly you can learn the folly of putting all your money in the commodity market 6 months before you retire, or that having to sell off non-liquid assets, such as oil and gas, to meet short-term cash needs can really hurt. We are sure that after a few sessions with Squire’s reality mode you will be better prepared for your financial future.

APPENDIX A

GLOSSARY OF FINANCIAL TERMS

The definitions used for this glossary are relative to their use in Squire and may not be generally accepted definitions. This is not intended to be an all-inclusive glossary of investment terms but we think it is a pretty good start!

Acreage

Same as Land.

Annuity

A series of equal annual payments.

Appreciate

To increase in value over time.

Assets

What a firm or individual owns; tangible things of lasting value, such as real property.

Balance Sheet

An enumeration at a point in time of what an economic unit owns and owes, and its net worth (equity).

Balloon Payment

A large principal payment, typically made on an interest-only loan.

Bankruptcy

In Squire, you are bankrupt if your net worth drops below \$3,000.

Bear Market

A market of declining security prices.

Beta Coefficient

A measure of risk; the risk associated with a particular stock relative to the market.

Bonds

An interest bearing note issued by a corporation to finance its growth.

Broker — Real Estate

A real estate broker is an individual licensed by the state to assist buyers and sellers in real estate transactions in return for a commission. A broker may have agents working for him.

Broker — Securities

A licensed individual who represents a buyer or seller of securities (stocks, bonds, etc.) in a transaction. He receives a commission for his services.

Bull Market

A market of rising security prices.

Call Option

The right to buy stock in a corporation for a specified price before a specified time.

Capital Gain

An increase in value of a capital asset, such as a stock.

Cash

This is the amount of money available to you to buy securities.

Cash Flow

The amount of money going into or out of your cash account.

Certificate of Deposit (CD)

A time deposit with a specified maturity date.

Close

When you close a real estate transaction, title is passed to the buyer and the seller is paid for the property.

Closing Costs

These are costs borne by both the buyer and seller during the sale of real property.

Command Mode

The screen that allows you to select major commands when playing Squire.

Commercial Property

Real property used by business owners for their day-to-day activities.

Commission

The fee paid to a broker for finding a buyer or seller for a transaction and executing the purchase or sale.

Commission — Real Estate

A real estate broker will receive 6% of the sale of a property from the seller. This is the real estate broker's compensation for matching available property with a qualified buyer. The commission may be split up among several brokers or agents.

Commodity

The tangible goods bought and sold while playing Squire.

Commodity Exchange

Place where people (or their representatives) who want to sell commodities meet with those who want to buy commodities.

Common Stock

A security representing ownership in a corporation.

Condominium

One or more units in a multi-unit dwelling, each separately owned.

Contract

A legal document that obligates you to deliver or take receipt of a commodity for a specified price at a specified time.

Contract Month

The calendar month that a commodity must be received or delivered.

Convertible Bond

A bond that may be exchanged for (converted into) common stock.

Coupon Rate

The specified interest rate, or amount of interest, paid by a bond.

Creative Financing

An unusual method of financing real property. Creative financing allows homes to be sold to individuals who might not otherwise be able to purchase a home.

Current Asset

An asset that should be converted into cash within 12 months.

Current Liability

A liability that has to be paid within the next 12 months.

Current Yield

Annual income divided by the current price of the security.

Default

The failure of a debtor to meet an interest or principle payment.

Demand

The public's desire or need for a particular product.

Depreciation

A method of reducing current taxes by writing off the cost of an asset over its useful life. A significant factor in real estate investment.

Discounted Bond

A bond that is sold for less than face or redemption value.

Dividend

A payment to stockholders.

Dividend Reinvestment

A plan that permits a stockholder to have cash dividends used to purchase more stock.

Down Payment

The amount of cash you pay out when purchasing real property.

Due-on-Sale

A provision in a loan contract that requires the borrower to pay off the loan if the real property used to secure the loan is sold.

Duplex

A house consisting of two separate family units.

Earnings

The profits of a corporation.

Environment

In Squire, the market environment consists of price changes and news reports.

Equity

Net worth of an individual or corporation; the difference between the current value of an asset and the loans out against it.

Escrow

Putting a real estate transaction in the care of a third party until certain conditions are met.

Face Value

The amount of a debt.

Fannie Mae

A term used to refer to the Federal National Mortgage Association. This is a private corporation chartered by the U.S. government which helps assure that enough money is available to home buyers.

FED

An abbreviation for the Federal Reserve System, whose job it is to influence the flow of credit and money. The FED is the central banking organization in the U.S.

FHLB

An abbreviation for the Federal Home Loan Bank Board. This agency supervises most savings and loan associations in the U.S.

Financial Goal

The purpose of investing.

Financial Planning

The program for meeting your financial goals.

First Mortgage

The primary loan on a piece of real property. The holder of the first mortgage will be paid off first in the event of a foreclosure.

Fixed Rate Mortgage

A loan on which the interest rate stays the same over the duration of the repayment period.

Fixer-Upper

A property that requires significant repairs.

Foreclosure

When a property owner fails to pay the mortgage payments, the property can be taken away and sold at auction. This process is called a foreclosure.

Fundamental Approach

A technique of examining supply and demand factors to project future commodity price trends.

Futures Price

The price of a commodity to be delivered at a future date.

Growth Stock

Shares in a company whose earnings are expected to grow at an above average rate.

Hedger

This is a business or individual who utilizes the commodity futures market to minimize the risk of future price fluctuations.

HUD

An abbreviation for the Federal Department of Housing and Urban Development.

Income

The flow of money produced by an asset.

Industry Group

Corporations in competition with one another to sell a particular product or service.

Inflation

The gradual increase of prices caused by either an increase in credit or an increase of money in circulation.

Insider Trading

Buying or selling by "insiders," corporation personnel who presumably have knowledge not yet available to the public.

Institutional Investor

An organization whose primary purpose is to invest its own assets or those held in trust by it for others. Examples include pension funds, insurance companies, investment companies, mutual funds, universities, and banks.

Interest

Payment for the use of money.

Intrinsic Value

An estimation of what an asset is worth.

Investor

One who buys securities (stocks, bonds, etc.)

I.R.A.

Individual retirement account.

Keogh Account

A retirement plan that is available to self-employed individuals.

Land

Real property upon which structures are built. The same as Acreage.

Landlord

An individual who owns residential or business rental property.

Leverage

The use of speculative tools (loans and margin) to control more securities than one could by purchasing them outright.

Liabilities

What an individual or a firm owes.

Limit Down

A commodity price that has moved downward to its maximum limit in a single trading session.

Limit Up

A commodity price that has moved upward to its maximum limit in a single trading session.

Limited Partnership

A speculative investment in which you have no management control and liabilities are limited.

Liquidity

The ease of converting assets to cash without substantial loss.

Listing

A list of available properties for sale.

Loan

Money borrowed to purchase investments.

Loan Fee

A fee paid when taking out a loan. It is, in effect, an advance interest payment.

Long Position

This is when you enter into a commodities contract that obligates you to purchase a commodity at a specified date and at a specified price.

Long-Term Debt

Debt that will be due in more than one year.

Long-Term Gain/Loss

When you hold an asset, such as real property, for at least 6 months, when it is sold you will pay a reduced tax on any profits. Unfortunately, you will receive a reduced tax credit on any losses.

Long-Term Investor

An investor whose primary goal is not short-term gain but steady growth of capital. The long-term investor generally takes fewer risks.

Lot

Unit of 100 shares of stock. Also referred to as a contract.

Lot — Real Estate

A lot is a vacant piece of land.

Margin — Commodity

The good faith deposit required by your broker when entering into a commodity futures contract.

Margin — Stock

If you borrow 50% of the value of a stock to purchase it you are said to be trading on 50% margin.

Margin Call

When a shareholder's equity in a stock purchased on margin drops below a previously agreed upon amount. A margin call can require the speculator to come up with enough money to meet that originally agreed upon amount.

Marginal Tax Rate

The tax rate, or tax bracket, paid on the last or highest taxable dollar.

Mortgage

A mortgage is a loan against real property and gives a lender the right to take over (foreclose) the property if the loan is not repaid.

Mortgage Amount

The amount of money borrowed.

Mortgage Payment

The monthly payment to the mortgage lender.

Mortgage Rate

The amount of interest paid on the mortgage amount.

Municipal Bond

A tax-exempt bond issued by a state or one of its political subdivisions.

Negative Cash Flow — Real Estate

When the total of your mortgage payments and operating expenses is greater than your income.

Net

Net worth, as displayed in the command mode. This is your yardstick of success while playing Squire.

Net Cash Flow

This is the difference between your total monthly expenses and income. It is expressed as a positive or negative number.

Net Profit/Loss

This is your profit, or loss, on the sale of an investment after taxes have been paid.

Net Worth

The value of an individual's cash, plus securities, minus outstanding loans; this is your yardstick of success while playing Squire. Net worth is the difference between the value of all your investments, and your obligations to repay loans.

News

Headlines which signify changes in the supply and demand situation.

Odd Lot

A unit less than 100 shares of stock.

Offset

When you offset a position, you cancel your commodities contract by taking a position opposite to the one you hold.

Operating Expenses

This is money required to maintain and pay taxes on land and buildings of a property owner.

Oscillator Graph

A graph showing commodity price changes, but not the actual price itself.

Permits

Remodeling of a home normally requires the approval of a local building inspector. If a home is sold without permits, it means it has been remodeled without approval from the inspector. The most common example of this is a garage converted into a bedroom.

Player Directory

Where the name, status, and score of each Squire player are stored.

Point and Figure Graph

A graph showing significant price movements without the consideration of time. "X"s indicate upward price moves, and "O"s indicate downward moves.

Portfolio

Listing of securities that an investor owns.

Principle

The amount of a debt, less the interest.

Probate Sale

The sale of real property by the court after the death of the owner.

Property

Residential or commercial real estate purchased while playing Squire.

Put Option

The right to sell stock in a corporation for a specified price before a specified time.

Real Estate Investment Trust

A speculative form of real estate investment that allows a small investor to invest in real estate in a similar manner to stock and bond investments.

Real Property

Land, along with the trees and buildings on it.

Rent Control

A law passed by some cities that limits the size of rent increases a residential property owner can give to his tenants. This usually has a negative effect on residential real estate prices.

Residential Property

A building that provides shelter and protection to a family.

Return on Assets

The ratio of earnings to total assets.

Return on Equity

The ratio of earnings to equity, or net worth.

Risk

The possibility of loss, the uncertainty of future returns.

S&L

A savings and loan association. A source of mortgage financing.

Safety

Little chance of loss of an amount invested.

Seasonal Prices

A pattern of monthly price changes that may be projected into future years.

SEC

An abbreviation for the Securities and Exchange Commission. A government regulatory body.

Second Mortgage

The secondary loan on a piece of real property. Usually, the second mortgage loan carries a higher interest than the first mortgage because, in the event of a foreclosure, the second mortgage is paid off after the first mortgage.

Second Mortgage Market

Many individuals invest their money in a second mortgage. The investor receives a monthly income from the mortgage payments. The second mortgage can be sold to another investor. This investing in, and selling of, second mortgages is called the second mortgage market.

Secondary Market

A market for buying or selling previously issued or sold assets.

Securities

Investments such as stocks, bonds, and commodity options.

Selling Short — Stocks

A speculative technique used when an investor believes the price of a stock is about to drop dramatically. The investor borrows shares (for a fee) from a broker, sells them, and banks the proceeds. When the stock drops in price, the investor buys the shares back and returns the shares to the loaning broker. The difference between the two prices is profit.

Settling Price

The price of a commodity at the close of each trading session.

Shareholder

One who owns stock in a corporation.

Short Position

When you enter into a commodity contract that obligates you to accept delivery and pay for a commodity at a specified date and at a specified price.

Short-Term Gain/Loss

When real property is sold after being held for less than 12 months, it is taxed at the same rate as ordinary income.

Short-Term Investor

A person who holds stocks for less than one year.

Speculator

An investor who is willing to accept substantial risks for the possibility of large gains.

Spot Price

The price a commodity is trading for today — not a future price.

Stock

Part ownership of a corporation, expressed in shares.

Stock Dividend

A dividend paid in stock, instead of cash.

Stock Exchange

A place where stocks and options are bought and sold. The most prominent stock exchange in America is the New York Stock Exchange, where stocks of the largest corporations are traded.

Striking Price

The stock price at which an investor may buy or sell an option and make a profit.

Supply

The ability of an industry or business to deliver a product that the public desires or needs.

Supply and Demand

Supply is the ability of an industry to supply a product the public needs or desires. Demand is the public's desire or need for a product.

EXAMPLE: If interest rates rise excessively, few people can afford the resulting high mortgage payments. Therefore, the demand for housing drops. As time passes, the number of unsold houses on the market increases due to a lack of buyers. This imbalance in supply and demand will force housing prices to drop to the point where the demand for housing is balanced by the supply.

Systematic Risk

Risk associated with fluctuations in the market as a whole.

Taxes

That portion of a taxpayer's profit that must be paid to the government.

Tax Credit

A credit against one's tax liabilities which reduces the amount of taxes owed; when you incur a loss on an investment, you can usually reduce your other taxable income by the amount of the loss (up to certain limits).

Tax-Exempt Bonds

A bond whose interest is excluded from income for personal income tax.

Tax-Exempt Fund

A mutual fund that specializes in tax-exempt securities.

Tax Obligation

The taxes that must be paid if the investment is sold.

Technical Approach

The analysis of short-term and long-term security price fluctuations to project the way prices are likely to move in the future.

Tenant

One who pays rent to occupy land.

Termite Report

Prior to the sale of real property, the lender normally requires an inspection of the property to verify that it is free of termites. The person inspecting the property issues a termite report showing the condition of the property with regard to termite damage.

Title Insurance

An insurance policy that protects the buyer from receiving a bad title to the property.

Total Return

The sum of dividend or interest yield, and capital gains.

Treasury Bills

Short-term debt of the federal government.

Treasury Bonds

Long-term debt of the federal government.

Treasury Notes

Intermediate-term debt of the federal government.

Trend

A sequence of events giving evidence of a direction. A stock that rises for several weeks exhibits an upward trend.

Triplex

A house consisting of three separate family units.

Unsystematic Risk

The risk associated with a particular security.

Valuation

The process of determining the current worth of an asset.

Volume

The number of shares of stock sold during a given week. "Heavy volume" means that many shares were traded.

Zoning

Regulations that control the use of land.

APPENDIX D

ERROR MESSAGES

A BUYER CANNOT BE FOUND

If you own a commodity for which the price is limit down during the current month, and you try to sell your contracts, Squire will not be able to find a buyer. This is because potential buyers are fearful the price will continue to drop during the next trading session.

A SELLER CANNOT BE FOUND

When you try to purchase a commodity for which the price is limit up, no one will sell you anything. This is because current contract holders are confident the price will continue to rise during the next trading session and don't want to sell.

NO SAVED GAME FOUND

There is no saved game on the disk. Create a new game using the Play or Reality option on the opening screen. Remember Squire deletes your saved game each time you recall it.

THERE ARE NO PROPERTIES LEFT TO BUY

You can buy up to 14 real estate properties during a single session. If you try to look at the real estate listings when there are no properties left, you will get this message.

THERE'S NO ROOM LEFT IN YOUR PORTFOLIO

Squire can only hold 15 items in your investment portfolio at one time. Sell something off to make room in your portfolio for new investments.

WE ARE STILL TRYING TO FIND A BUYER

You will see this message if you try to sell collectibles that you have previously instructed the computer to sell.

WAIT UNTIL AT LEAST JULY

You will see this message if you try to buy cattle before July. As cattle is sold 6 months after you purchase it, there would be no purpose in buying cattle in March just to have it sold in the same taxable year.

YOU MUST ENTER A VALID LETTER

You entered an incorrect letter in response to a prompt from Squire. Remember that most of Squire's prompts can be answered with a single keystroke, and pressing the RETURN key is not necessary. The allowable letters are usually to the left of each item on the menu.

YOU MUST ENTER A VALID NUMBER

Re-enter a correct number from the menu.

YOU DON'T OWN ANYTHING

You selected SELL or PORT in the command mode when you don't own anything.

YOU DON'T HAVE ANY INTERIM GOALS

You selected INTERIM in the command mode when you don't have any interim goals. You must play in the reality mode in order to have interim goals.

YOU MUST ENTER Y OR N

You entered the wrong character in response to a Yes or No prompt. Pressing the SPACE BAR is the same as answering No.

YOU DON'T HAVE ENOUGH MONEY

You have attempted to make an investment when you do not have enough cash.

YOU CAN'T BUY ZERO

If you enter zero, or just press the RETURN key when making an investment, you will see this message. This error message does not beep, and is displayed for a shorter time than other messages.

YOU ENTERED LESS THAN THE MINIMUM AMOUNT

Many of Squire's investment tools have minimum investment requirements. If you try to buy less than the minimum, you will see this prompt.

YOU MAY ONLY INVEST ONCE A YEAR

You can only make one \$2,000 IRA investment each year. If you try to invest in IRA's twice in the same year, you will see this message.

YOU ALREADY OWN A COLLECTIBLE

You can only hold one collectible at a time in Squire. If you try to purchase a collectible when you already own one, you will get this message.

YOU CAN'T SELL ZERO

If you enter zero, or just press the RETURN key, when selling an investment, you will see this message. This error message does not beep, and is displayed for a shorter time than other messages.

YOU DON'T OWN THAT MANY

You tried to sell more of something than you own.

YOU DON'T HAVE THAT MUCH MONEY

You have attempted to take more money out of your IRA or money market account than you have in it.

YOU MAY NOT ADD ADDITIONAL PLAYERS

You are only allowed to have 14 players in the player directory. Use the Clear Player Directory Option from Squire's first screen to erase the directory.

YOU MUST ENTER A VALID YEAR

The valid range for years is shown in parentheses on each prompt for a year.

YOU MUST ENTER A VALID AGE

When in the reality mode, Squire will ask you for both your current age and the age at which you plan to retire. As Squire is a 20-year simulation, the difference between your current age and your retirement age cannot exceed 20 years.

OTHER ERRORS

If you encounter an error that makes your Squire disk inoperable, please call Blue Chip Technical Support at 818-346-0730.

APPENDIX C

ABBREVIATIONS

The following abbreviations are used in Squire's various screens. For definitions of some terms, check the glossary in Appendix A.

Abbreviation	Description
ABOND	AA Corporate Bond
ALD	Allied Corporation
B	Backwards
BAM	Bank of America
BBOND	B Corporate Bond
BCSTK	Blue Chip Stock
/BOND	Per Bond
/BU.	Per Bushel
CA-CM	California Commercial
CA-RS	California Residential
COLL	Collectibles
COMD	Commodity
CONT.	Contract
CONT. SIZE	Contract Size
CTS/BU	Cents per Bushel
CR	Tax Credit
CREDIT	Tax Credit
CWE	Commonwealth Edison
DEC	Digital Equipment Corporation
DIV-INT	Dividend Less Interest Payment
F	Forward
FDX	Federal Express
GLD	Gold
GSTK	Growth Stock
IBM	International Business Machines
INT	Interest

Abbreviation	Description
INT PAY	Interest Payment
INVT	Investment
IRA	Individual Retirement Account
LONG	Long-Term Gain or Loss
\$MARK	Money Market
MGM	Metro Goldwyn Mayer
MONTH	Per Month
NAM	Name
NET	Net Worth
NY-CM	New York Commercial
NY-RS	New York Residential
O&G	Oil and Gas
/OZ	Per Ounce
\$/OZ	Dollars per Ounce
PCHANGE	Price Change
QTY	Quantity
R	Reference Number
RE	Real Estate
REF	Reference Number
—S	Short Sale
/SHR	Per Share
SHORT	Short-Term Gain or Loss
SHORT	Short Sale on Growth Stocks
SOY	Soybeans
YCHGE	Yield Change

MS-DOS LOADING INSTRUCTIONS

A. HOW TO PREPARE YOUR DISK FOR USE

1. Turn on your computer with the DOS disk in Drive A.
2. Answer any time and date prompts. (You should end up with an A prompt, that is an A > or A:, on your screen.)
3. Remove your DOS disk from drive A, but keep it handy. (You will need it for step 6.)
4. Place your SQUIRE disk in drive A.
5. Type SETUP and press your RETURN key.
6. You will enter a routine that will configure the program disk for your computer. Please follow the directions that appear on your screen.

B. HOW TO START A SQUIRE SESSION

1. You must have an A prompt on your screen. If you have just finished preparing your disk, the A prompt should be on your screen. Otherwise, follow directions A1, A2, and A3.
2. Place your SQUIRE disk in drive A.
3. Type START and press your RETURN key.
4. GOOD LUCK!

C. HELPFUL HINTS

1. The SQUIRE disk will only work in drive A.
2. The SQUIRE disk may not be copied to another disk or hard drive.
3. You only use the SETUP routine (step #A5) the first time you use the disk.
4. If you are asked for a 'COMMAND COM' disk, it means your DOS disk.
5. If you are asked for a 'BATCH FILE' disk, it means your SQUIRE disk.
6. Your RETURN key may be called an ENTER key or have an arrow on it that goes down and turns to point to the left.

APPLE LOADING INSTRUCTIONS

A. HOW TO PREPARE YOUR DISK FOR USE

1. Your Apple SQUIRE diskette is ready for use as shipped.

B. HOW TO START A SQUIRE SESSION

1. Turn your computer off. Place your SQUIRE diskette in drive D1 and turn the power on. After a short pause, you may begin.
2. Because the Apple version of SQUIRE is shipped on a "floppy" disk, you will be asked at the start and end of each session to turn your disk over and re-insert it in the disk drive.

MACINTOSH LOADING INSTRUCTIONS

Turn the Macintosh on. You will see a small picture (referred to as an icon) of a Macintosh disk on the screen. The blinking question mark within the disk is the Macintosh's way of asking you to insert a disk. Insert the SQUIRE disk, metal end first with the label facing up, into the disk drive. SQUIRE will start automatically.

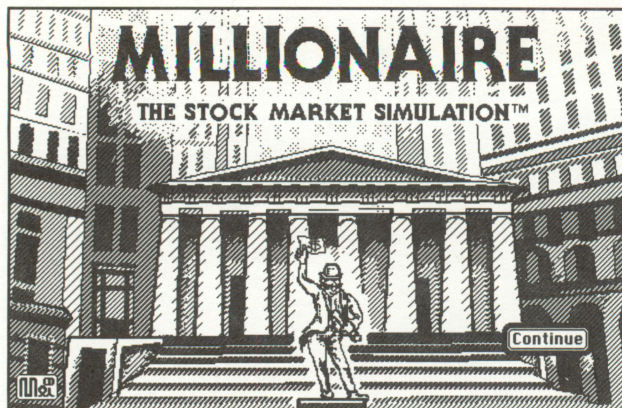
If, when you insert the SQUIRE disk, the desktop contains icons other than the empty disk icon, SQUIRE will not start automatically. Instead, icons related to the SQUIRE disk will appear on the desktop. This being the case move the tip of the pointer onto the icon entitled "Squire," and click the mouse button. The "Squire" icon will become highlighted. (This is the standard way in which you will select icons on the Macintosh.) Choose "Open" from the "File" menu. SQUIRE will now start.

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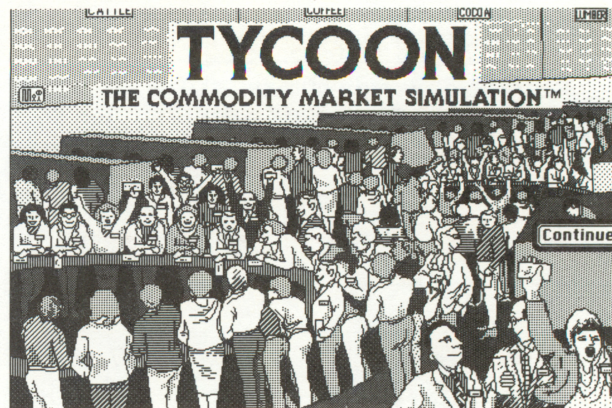


Use giants like GM and Sears to climb financial heights.

Learn about the stock market by playing it. Enter the high-powered world of the New York Stock Exchange as a NOVICE with \$10,000 and a choice of 15 stocks from 5 industry categories. Build your earnings as you buy and sell your stock.

Progress to INVESTOR, SPECULATOR, PROFESSIONAL, and BROKER and you will be able to buy on margin, use put and call options, and borrow on your net worth. Tax consequences and broker commissions are two of the factors you must take into consideration. You'll have access to corporate histories and financial reports and a chance to review price trends — before making decisions that affect your portfolio.

MILLIONAIRE spans 77 weeks of market activity. Try **one** — you'll be back for more.



Outmaneuver the commodities market.

If you thrive on the unpredictable twists and turns of the commodities market, **TYCOON** will transport you into that highly competitive arena. Imagine trading in gold and foreign currencies, oil and agricultural products.

You'll have comprehensive charts plus vital background, but woe to the investor who thinks it is easy to master this volatile market. **TYCOON** is designed to besiege you with political and economic changes that could turn a fortune into a financial nightmare — overnight.

Not a game for the fainthearted, **TYCOON** lets you soar high — or plummet fast — without any actual risk.

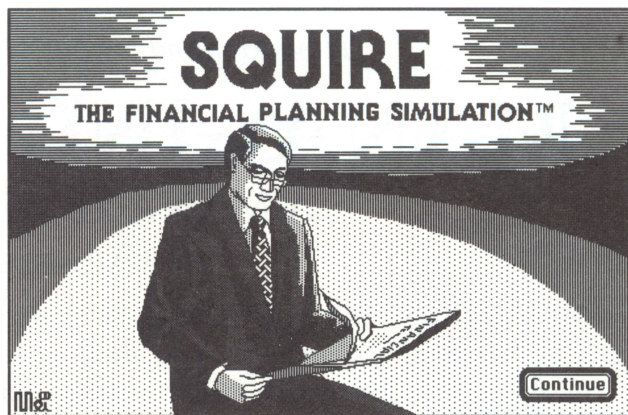


Amass a personal empire in real estate.

Real estate speculation is no longer a pastime reserved for the idle rich; now everyone can play the game — with **BARON**, the new software program that combines action-packed entertainment with a down-to-earth learning experience that can be applied to the real world.

Learn the ins and outs of investing in property; buy and sell homes, shopping malls, forests and farms. But don't count your mortgages too soon! Just when you think you've mastered the market, a natural disaster or economic catastrophe may send you to the poorhouse.

You start with \$35,000 and have 52 game-weeks to make a million by buying and selling property in five U.S. states. If there's a real estate **BARON** within you, this game will liberate it!



Plug in your own finances and pick a future lifestyle.

SQUIRE is unique among the computer games because, in addition to the basic game itself, it lets you "play" your own personal game of life — with real life goals and a game plan you devise.

The basic game starts at age 35 with a goal of retirement at 55. The game also sets 7 interim goals, such as sending your children to college or planning an extended vacation. You may also receive an inheritance or windfall gifts.

In the "Reality Mode" you enter your present age, current assets, desired economic level and target date for achievement. You'll explore a wide range of investment opportunities to discover which avenues hold the greatest promise for you personally.

That's **SQUIRE** — comprehensive, challenging, **practical**.

How to manage your climb up the ladder of success!

MANAGING FOR SUCCESS™

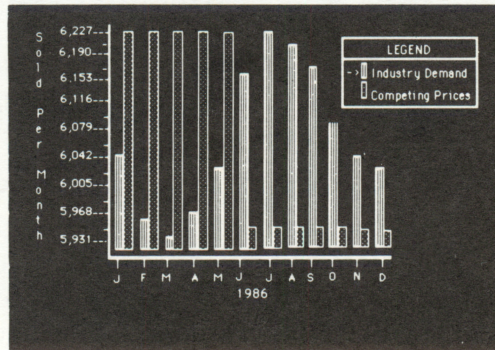
A MANAGEMENT SIMULATION

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MANAGING FOR SUCCESS is the business simulator that will give you the feel of running a \$1,000,000 plus business. You are the decision maker. You are the leader. Make decisions based on business capabilities, business climate and business goals.

YOU ARE IN CHARGE:

- Sales and Marketing
- Finance
- Research and Development
- Manufacturing
- Production
- Scheduling
- Inventory Management

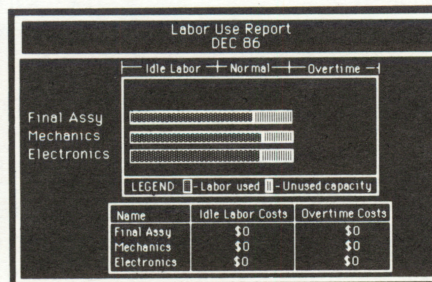


An outstanding training tool for supervisors and line managers. Gain insight into the broader aspects of business.

Powerful Graphing Utility, see the Big Picture at a glance.

Blue Chip Robotics Balance Sheet -- DEC 86	
Assets	
Current Assets	
Cash	\$2,572,900
Receivables	\$3,444,108
Inventory	\$6,476,678
Net Fixed Assets	
Equipment	\$625,080
Total Assets	\$13,118,766 <-
Liabilities	
Payables	\$742,156
Loans	\$0
Total Liabilities	\$742,156 <-
Stockholders Equity	
Common Stock	\$10,845,916
Retained Earnings	\$1,530,694
Total Equity	\$12,376,610 <-
Total Liab. and Equity	\$13,118,766

Examine Financial Statements



Get the information you need

DESCRIPTION MENU	
Departments	Miscellaneous
Manufacturing Engineering	Balance Sheet
Finance	Cash Forecasting
Material Control	Cash Flow Statement
Production	Chief Executive Officer
Quality Control	Increasing Market Share
Research and Development	Improving Cash Flow
Sales and Marketing	Improving Profits
	Income Statement
	Market Conditions
	Work Sheet

Quick Reference explains basic business concepts

IMPORTANT: READ THIS CAREFULLY

The Warranty Registration Card included with all programs must be sent in within 10 days after your purchase to validate the warranty. In the event that the diskette should fail to operate within ninety days of purchase, return it to Blue Chip Software for free replacement. **You must** include proof of purchase. If the diskette fails to operate after the 90-day period, there will be a twelve-dollar replacement charge.



Customer Service & Warranty Information

(Valid in U.S.A. and Canada Only)

Customer Service

If you have questions about using a DesignWare program, after reading the manual, please call our Software Hot Line 415-546-1866. We will be happy to help you. (Software Hot Line hours Monday through Friday 8 a.m. - 5 p.m. p.s.t.)

LIMITED 90-DAY WARRANTY - DESIGNWARE & BLUE CHIP DISKS

DesignWare, Inc. warrants to the original consumer that the DesignWare disk shall be free from any defects in material or workmanship for a period of 90 days from the date of purchase.

Any DesignWare disk which is found to be defective during the warranty period will be replaced by DesignWare. Return the disk, accompanied by proof of date of purchase satisfactory to DesignWare, no later than one (1) week after the end of the warranty period, shipping charges prepaid, to: DesignWare, Inc., Customer Relations, 185 Berry Street, San Francisco, CA 94107.

This warranty shall not apply if the disk has been damaged by negligence, accident, improper or unreasonable use, or by any other causes unrelated to defective materials or workmanship.

DISCLAIMER OF WARRANTIES - DESIGNWARE COMPUTER PROGRAMS

All DesignWare computer programs and related informational materials are distributed on an "as is" basis without warranty of any kind. Any statements concerning capabilities or utility of a computer program are not to be construed as express or implied warranties. The entire risk as to the quality and performance of such programs is with the purchaser. Should such programs prove defective following their purchase, the purchaser and not the manufacturer, distributor, or retailer assumes the entire cost of all necessary servicing or repair, (except for replacement by DesignWare of defective disks as provided above).

EXCLUSIONS FROM WARRANTIES - DESIGNWARE DISKS AND COMPUTER PROGRAMS

The exclusions and disclaimers in this paragraph apply to all DesignWare disks and DesignWare computer programs. All implied warranties (including warranties of merchantability and fitness for any particular purpose) with respect to DesignWare products are hereby excluded and disclaimed. DesignWare shall not be liable for incidental and/or consequential damages, including injury to property or persons, that may result from use, malfunction, or failure of DesignWare disks and computer programs. In all cases, the liability of DesignWare shall be limited to replacement of defective disks as provided above.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This section regarding warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Back-up Copies

One back-up diskette per product may be purchased directly from DesignWare for \$12.00* if, and only if, your owner registration card is on file at DesignWare.

Out-of-Warranty Diskette Replacement

If you need to replace your DesignWare program diskette after the 90 day warranty period, DesignWare will replace it for \$12.00* if, and only if, your owner registration card is on file at DesignWare and you send in the damaged or inoperative diskette.

* Managing for Success/American Dream is \$18.00
California residents must add 6.5 % sales tax (\$.78 on \$12 or \$1.17 on \$18)

THREE SPECIAL OFFERS

THREE REASONS YOU WANT TO COMPLETE AND RETURN THIS CARD TODAY

- (1) **Free** replacement of defective diskettes during 90-day warranty period
- (2) Replacement of damaged diskettes after the 90-day warranty period for **only \$12.00***
- (3) One back-up diskette per product purchased for **only \$12.00***

These special offers are available to you if, and only if, you complete the attached owner registration card and return it within 10 days of purchase.

*California residents add 6½% sales tax (\$.78)
Managing for Success/American Dream is \$18.00

BC01



PLACE
STAMP
HERE

**Customer Service
DesignWare, Inc.
185 Berry Street
San Francisco, CA 94107**

OWNER REGISTRATION CARD

Blue Chip Program Purchased _____

Computer Format _____

Name _____

Occupation _____ Age _____

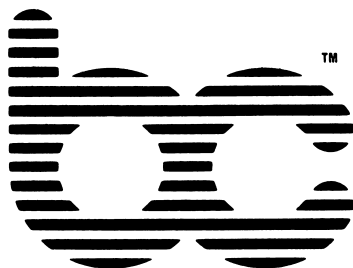
Address _____

City _____ State _____ Zip _____

Type of Computer _____

Store where purchased: _____

Comments about program: _____



BC01

SQUIRE

THE FINANCIAL PLANNING SIMULATION™

Your goal is to retire as a millionaire at 40...50...60. The age doesn't matter. What does — and the factor that distinguishes **SQUIRE** from other computer games — is the "Reality Mode," a special feature which enables you to "play" with real life goals and devise a financial gameplan for getting there.

SQUIRE is a unique microcomputer game that permits the player to experiment with a full range of investment options — stocks, bonds, real estate, commodities — then combine hypothetical experience with actual income and expenses to arrive at a personal financial gameplan geared toward retiring as a millionaire within 20 years!

The game emphasizes the time value of money, particularly inflation and interest-bearing investments, with added emphasis on tax advantaged strategies.

That's **SQUIRE** — comprehensive, challenging and practical.

Compressing 20 years of investment activity into two hours of computer time, **SQUIRE** allows you

to experiment with 11 different categories of investments including stocks, bonds, commodities and real estate. The game also incorporates 7 interim goals, such as sending your children to college or planning an extended vacation. There is also the possibility of receiving inheritance windfalls and gifts.

Beginning with a capital base of \$30,000 **SQUIRE** is designed to advance you through a series of progressively more sophisticated levels of achievement — from novice to investor, speculator to broker — until you've reached your goal of becoming a **SQUIRE**...and a millionaire.

SQUIRE from Blue Chip Software — the financial planning simulation that is much more than just a game!

Other games from Blue Chip Software include **MILLIONAIRE** (stocks), **BARON** (real estate), and **TYCOON** (commodities).



BLUE CHIP SOFTWARE™